final environmental impact statement

U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

CRUDE OIL TRANSPORTATION SYSTEM: VALDEZ, ALASKA TO MIDLAND, TEXAS

(AS PROPOSED BY SOHIO TRANSPORTATION COMPANY)

CHAPTER 9
CONSULTATION AND COORDINATION

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FINAL

ENVIRONMENTAL STATEMENT

CRUDE OIL TRANSPORTATION SYSTEM: VALDEZ, ALASKA TO MIDLAND, TEXAS

(As Proposed by SOHIO Transportation Company)

CHAPTER 9

CONSULTATION AND COORDINATION

Prepared by

Bureau of Land Management
U.S. Department of the Interior

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TABLE OF CONTENTS

CHAPTER 9

CONSULTATION AND COORDINATION

Section	Title	Page
9.1	INTRODUCTION	9-1
9.2	PREPARATION OF THE DRAFT ENVIRONMENTAL STATEMENT	9-1
9.2.1	Organization of the ES preparation team	9-2
9.2.2	Contracts with outside consulting firms	9-2
9.3	OTHER AGENCY PARTICIPATION IN PREPARATION OF THE DES	9-4
9.4	HISTORIC PRESERVATION AND ARCHAEOLOGICAL COORDINATION	9-4
9.5	FEDERAL PARTICIPATION	9-5
9.6	STATE PARTICIPATION	9-7
9.6.1	State of California	9-7
9.6.2	Other affected states	9-8
9.7	LOCAL AGENCY PARTICIPATION	9-10
9.8	CIVIC GROUP PARTICIPATION	9-12
9.9	ENVIRONMENTAL GROUPS PARTICIPATION	9-14
9.10	PRIVATE INDUSTRY CONSULTATION	9-14
9.11	CONTACTS WITH APPLICANT	9-15
9.12	PUBLIC PARTICIPATION MEETING DURING DES PREPARATION	9-26
9.13	PRELIMINARY DISTRIBUTION OF WORKING DRAFT COPIES	9-29
9.13.1	Supplemental mailing of preliminary mitigating measures	9-30
9.14	COORDINATION IN THE REVIEW OF THE DRAFT ENVIRONMENTAL STATEMENT	9-32
9.15	DES AVAILABILITY	9-43
9.16	ORAL TESTIMONY RECEIVED AT HEARINGS	9-44
9.16.1	Specific comments and responses excerpted from oral testimony	9-47
9.17	COMMENTS RECEIVED AND RESPONSES	9-51
9.17.1	Federal Governmental Units	9-54
9.17.2	State Governmental Units	9-122
9.17.3	Local Governmental Units	9-185
9.17.4	Private Organizations	9-212

TABLE OF CONTENTS

CHAPTER 9 (CONTINUED)

CONSULTATION AND COORDINATION

Section	Title	Page
9.17.5	Individuals	9-238
9.17.6	Applicant and Applicant's Representatives	9-243
9.17.7	Miscellaneous Letters	9-251

LIST OF FIGURES

CHAPTER 9

Title	Page
Flow chart of project	9-3

LIST OF TABLES

Table	Title	Page
9.14-1	DES Distribution and Comments Record	9-33

CHAPTER 9

CONSULTATION AND COORDINATION

9.1 INTRODUCTION

The Bureau of Land Management requested and received the consultation of many organizations and individuals, public and private, in developing and coordinating the Draft and Final Environmental Statements (DES, FES) on a proposal to transport crude oil from Valdez, Alaska, to Midland, Texas.

Standard Oil Company of Ohio (SOHIO), through its subsidiary, SOHIO Transportation Company of California, filed applications with the Secretary of the Interior, the U.S. Army Corps of Engineers, the Federal Power Commission, and other Federal, state, and local agencies for the necessary certificates and permits which must be granted before the proposal can be implemented.

9.2 PREPARATION OF THE DRAFT AND FINAL ENVIRONMENTAL STATEMENTS

The Department of the Interior determined that granting of the necessary permits and certificates for use of land and water resources under Federal jurisdiction in the Pacific Ocean area, and the states of California, Arizona, New Mexico, and Texas, would constitute "a major Federal action significantly affecting the quality of human environment." Therefore, under the provisions of the National Environmental Policy Act of 1969, an Environmental Statement was required. It was also determined that a sound and comprehensive environmental analysis of the proposal would be useful and beneficial to other Federal agencies and bureaus which had received applications for permits or certificates. A flow chart illustrating

activities which went into preparation of the DES and FES appears on the following page.

9.2.1 Organization of the ES preparation team

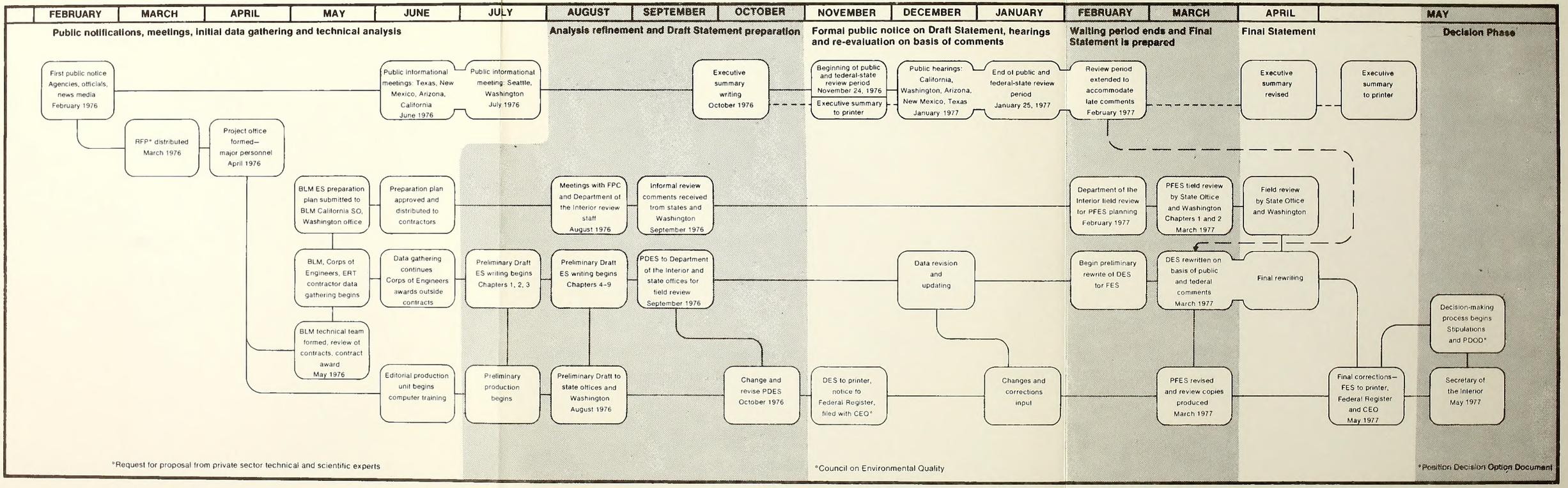
The Department of the Interior assigned lead agency responsibility for preparation of the Environmental Statement to the Bureau of Land Management (BLM)'s California State Director. An interdisciplinary environmental evaluation team was assembled at Los Alamitos, California, in April 1976, and was directed to collect data and prepare Draft and Final environmental statements.

The analysis team included professional expertise in the fields of petroleum/civil engineering, wildlife and marine biology, range conservation, landscape architecture, economics, land use planning, geology, air quality, botany, and archaelogy. Liaison personnel from Bureau of Land Management State Offices of California, Arizona, and New Mexico were assigned to assist the team.

The U.S. Army Corps of Engineers, Los Angeles District, assumed responsibility for preparation of analyses covering the proposed Port/terminal facilities at Long Beach, California, and the marine transportation route from Valdez, Alaska, to the Port of Long Beach. Corps of Engineers analyses and evaluations have been incorporated into the Environmental Statement.

9.2.2 Contracts with outside consulting firms

A consulting contract was executed 28 May 1976 between BLM and Environmental Research and Technology, Inc. (ERT, Inc.), of Westlake Village, California. Under the terms of the contract, ERT, Inc. and its subcontractors conducted investigations, collected data, prepared analyses, and provided informational input to the ES in the areas of air quality, socioeconomics,


FEBRUARY
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JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
Public notifications, meetings, initial data gathering and technical analysis
Analysis refinement and Draft Statement preparation
Formal public notice on Draft Statement, hearings and re-evaluation on basis of comments
Waiting period ends and Final Statement is prepared
Final Statement
Decision Phase
First public notice Agencies, officials, news media February 1976
RFP* distributed March 1976
Project office formed—major personnel April 1976
Public informational meetings: Texas, New Mexico, Arizona, California June 1976
Public informational meeting: Seattle, Washington July 1976
Executive summary writing October 1976
Beginning of public and federal-state review period November 24, 1976
Executive summary to printer
Public hearings: California, Washington, Arizona, New Mexico, Texas January 1977
End of public and federal-state review period January 25, 1977
Review period extended to accommodate late comments February 1977
Executive summary revised
Executive summary to printer
BLM ES preparation plan submitted to BLM California SO, Washington office
Preparation plan approved and distributed to contractors
Meetings with FPC and Department of the Interior review staff August 1976
Informal review comments received from states and Washington September 1976
Department of the Interior field review for PFES planning February 1977
PFES field review by State Office and Washington Chapters 1 and 2 March 1977
Field review by State Office and Washington
BLM, Corps of Engineers, ERT contractor data gathering begins
Data gathering continues Corps of Engineers awards outside contracts
Preliminary Draft ES writing begins Chapters 1, 2, 3
Preliminary Draft ES writing begins Chapters 4-9
PDES to Department of the Interior and state offices for field review September 1976
Data revision and updating
Begin preliminary rewrite of DES for FES
DES rewritten on basis of public and federal comments March 1977
Final rewriting
BLM technical team formed, review of contracts, contract award May 1976
Editorial production unit begins computer training
Preliminary production begins
Preliminary Draft to state offices and Washington August 1976
Change and revise PDES October 1976
DES to printer, notice to Federal Register, filed with CEQ*
Changes and corrections input
PFES revised and review copies produced March 1977
Final corrections—FES to printer, Federal Register and CEQ May 1977
Decision-making process begins Stipulations and PDOD*
Secretary of the Interior May 1977
*Request for proposal from private sector technical and scientific experts
*Council on Environmental Quality
*Position Decision Option Document

energy supply and demand, fresh water quality, noise, geotechnics, and an engineering evaluation of the existing natural gas pipeline proposed for conversion. ERT, Inc. subcontractors included: Earth Science Associates, Palo Alto, California; Robert Brown Associates, Carson, California; EDAW, Inc., Newport Beach, California; and, Sergent-Hauskins-Bechwith, Phoenix, Arizona.

A consulting contract was executed 6 August 1976 between the Corps of Engineers and Tetra Tech, Inc., of Pasadena, California, whereby Tetra Tech, Inc., would conduct an environmental assessment of the proposed marine transportation route from Port Valdez to the Port of Long Beach and provide the information to the Corps of Engineers for inclusion in the Environmental Statement portions related to consideration of the Pacific Ocean environment. This material was not available at the time the Draft went to press, but the data are included in the FES.

9.3 OTHER AGENCY PARTICIPATION IN PREPARATION OF THE DES

During the data collection portion of the preparation process, the ES team traveled into the field for familiarization with the corridor of the proposed pipeline. In addition, liaison was maintained along the route with Federal, state, and local agencies, and industries, organizations, universities, and individuals concerning specific areas of expertise.

9.4 HISTORIC PRESERVATION AND ARCHAEOLOGICAL COORDINATION

The Advisory Council on Historic Preservation was not contacted during preparation of the DES but was given the opportunity to comment, and did comment, on the published Statement. Contacts with archaeological and historic preservation offices in the various affected states were made, as follows:

14 June 1976 9 August 1976	BLM Arizona State Archaeologist Phoenix, Arizona
15 June 1976	El Paso Centennial Museum El Paso, Texas
23 June 1976	California Department of Parks and Recreation, History Preservation Section Sacramento, California
25 June 1976	Arizona State Parks Department Historic Preservation Office Phoenix, Arizona
8 July 1976	BLM California State Archaelogist Sacramento, California
23 July 1976 11 August 1976	New Mexico State Planning Office Cultural Properties Review Committee Santa Fe, New Mexico
10 August 1976	National Park Service Interagency Archaeological Services, Office of Archaeology and Historic Preservation Denver, Colorado
16 August 1976 10 September 1976	Agency of Conservation Archaeology Eastern New Mexico University Portales, New Mexico
19 August 1976	BLM New Mexico State Archaeologist Santa Fe, New Mexico
13 September 1976	Arizona State Museum University of Arizona Tucson, Arizona

9.5 FEDERAL PARTICIPATION

During preparation of the DES and FES, consultations were conducted at a working level with departmental, bureau, and other Federal agencies having special expertise relating to the proposed action in order to gain information and to close data gaps. The following were informed of the proposal and the preparation of the DES and FES, and were consulted:

Washington, D.C.

U.S. Department of the Interior,
- BLM Division of Lands and Realty
- BLM Environmental Assistance Staff

Federal Power Commission
National Oceanic and Atmospheric Administration
Department of State - Panama Desk
Department of the Navy
- Office of Naval Petroleum

Alaska

BLM Alaska Outer Continental Shelf Office
Seventeenth Coast Guard District, Juneau

Colorado

National Oceanic and Atmospheric Administration

Washington

Canadian Consulate General
Canadian Environmental Protection Service
BLM-Spokane District Office
Environmental Protection Agency
Federal Energy Administration, Region X
Federal Preparedness Agency
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
U.S. Maritime Administration
U.S. Army Corps of Engineers, Seattle District
U.S. Coast Guard, 13th District
U.S. Department of the Interior
    Office of the Secretary
U.S. Fish and Wildlife Service
U.S. General Accounting Office
U.S. Navy, 13th District
U.S. Consulate General, Vancouver

Oregon

BLM State Office

California

BLM State Office
BLM Pacific Outer Continental Shelf Office
BLM Riverside District Office
U.S. Bureau of Reclamation Regional Office
U.S. General Accounting Office
Environmental Protection Agency, Region IX
Federal Energy Administration, Region IX
U.S. Department of the Interior
    Office of the Secretary-Los Angeles
    Office of the Secretary-San Francisco
    Office of the Solicitor
Western Federal Regional Council
National Park Service, Region IX
U.S. Geological Survey-Topography Branch
U.S. Army Corps of Engineers-Los Angeles District
U.S. Fish and Wildlife Service
U.S. Navy
    District 11
    District 12
U.S. Coast Guard
    District 11
    District 12
U.S. Bureau of Indian Affairs
    Palm Springs Office
    Riverside Office
California Congressional Delegation

Arizona

BLM State Office
BLM Phoenix District Office
BLM Safford District Office
BLM Yuma District Office
Kofa Game Range
U.S. Bureau of Indian Affairs
U.S. Fish and Wildlife Service
U.S. Forest Service
U.S. Geological Survey
Arizona Congressional Delegation

New Mexico

BLM State Office
BLM Las Cruces District Office
BLM Roswell District Office
U.S. Bureau of Outdoor Recreation
U.S. Bureau of Reclamation
Environmental Protection Agency
National Park Service, Region IX
Navajo Indian Tribal Council
U.S. Soil Conservation Service
U.S. Army Corps of Engineers
U.S. Bureau of Indian Affairs
U.S. Bureau of Mines
U.S. Fish and Wildlife Service
U.S. Forest Service

Texas

U.S. Department of Agriculture
U.S. Army Corps of Engineers, Ft. Bliss

Miscellaneous

BLM New York Outer Continental Shelf Office

9.6 STATE PARTICIPATION

Working relationships were established with various agencies in the separate states having special discipline expertise for the purpose of gaining information and advice in the preparation of the DES and FES.

9.6.1 State of California

A Federal/state task force on the SOHIO proposal was formed in March, 1976 and included all pertinent state and Federal agencies within California having responsibility, advisory or jurisdictional authority for the California state Environmental Impact Report on the proposal and/or the

Federal ES. Meetings of this task force, which took place several times during the preparation period, were attended by members of the ES team.

In addition, there were frequent consultations with the Port of Long Beach and the California Public Utilities Commission, co-lead agencies supervising concurrent preparation of the State of California Environmental Impact Report on the Long Beach portion of the proposal.

Consultation and coordination in preparation of the DES and FES took place between the ES Analysis Team and the following California state agencies, groups, and individuals:

Office of the Lieutenant Governor
Air Resources Board
Coastal Zone Conservation Commission
Department of Housing and Community Development
Department of Food and Agriculture
Department of Fish and Game
Department of Navigation and Ocean Development
Department of Transportation, Right-of-Way Section
Department of Conservation
    Division of Oil and Gas
    Division of Mines and Geology
Energy Resources Conservation and Development Commission
Office of Planning and Research
Department of Parks and Recreation
    Archaeology Survey Lab
Public Utilities Commission
State Water Resources Control Board
    Los Angeles Regional Water Quality Control Board
South Central Regional Coastal Commission
Department of Water Resources
State Lands Commission
The Resources Agency
University of California Dry Lands Research Institute
University of Southern California, Sea Grant Institutional
    Program, Marine Advisory Services
California State Legislators

9.6.2 <u>Other affected states</u>

Consultation and coordination with other states took place also.

Alaska

State Department of Environmental Conservation
State Department of Natural Resources

Washington

Department of Fisheries
Department of Commerce and Economic Development
Department of Game
Energy Facility Site Evaluation Council
Environmental Protection Service
House Transportation and Utilities Committee
Oceanographic Commission
Office of Community Development
Office of the Governor
State Energy Office
University of Washington, College of Fisheries
Department of Natural Resources
Washington State Legislators

Arizona

State Advisory Board to BLM
Corporations Commission
Governor's Commission on Arizona Environment
Office of Economic Planning and Development
Office of the Governor
Oil and Gas Conservation Committee
Planning and Zoning Commission
Department of Game and Fish
Department of Revenue
Energy Resources Board
Environmental Improvement Agency
Highway Department
State Lands Department
State Parks Board
Water Commission
University of Arizona
Arizona State University, College of Liberal Arts
Arizona State Legislators

New Mexico

Corporation Commission
Council on Environmental Quality
Department of Agriculture
Department of Development
Energy Resources Board
Environmental Impact Agency
Environmental Improvement Agency
Health and Social Services Department
Highway Department
Historic Preservation Office
Legislative Energy Committee
Natural Resources Conservation Commission
Office of the Governor
Oil Conservation Commission
Park and Recreation Commission
Public Service Commission
Southern Rio Grande Council of Governments
State Engineer
State Fish and Game Department
State and Interstate Stream Commission
State Lands Commission
State Park Commission
State Planning Office
University of New Mexico
New Mexico State Legislators

Texas

Air Control Board
Attorney General's Office
Bureau of Budget and Planning
Bureau of Economic Geology
Comptroller's Office
Department of Health Resources
General Land Office
Governor's Energy Advisory Council
Highway Department
Historical Commission
House Energy Committee
Industrial Commission
Office of the Governor
Office of the Lieutenant Governor
Office of Planning Coordination
Office of the Speaker
Parks and Wildlife Commission
Public Utilities Commission
Railroad Commission of Texas
Senate Natural Resources Committee
State-Federal Relations Office
Water Quality Board
Water Rights Commission
Texas State Legislators

9.7 LOCAL AGENCY PARTICIPATION

In areas where implementation of the proposal could have a potential effect, whether direct or indirect, local agencies and local government officials were provided with information and invited to participate by providing data for the preparation of the DES. Consultation and coordination was achieved with city and county agencies through letters, telephone calls, and personal visits in the following areas:

Alaska

City of Valdez

Canada

City of Edmonton, Province of Alberta
City of Kitimat, Province of British Columbia

Washington

Board of Clallam County Commissioners
Clallum County Planning Commission
Puget Sound Council of Governments
Port of Seattle, Planning and Research
City of Port Angeles
City of Seattle Environment Management Division

California

Los Angeles County Parks and Recreation Department
Los Angeles County Regional Planning
Los Angeles County Flood Control Board
Los Angeles County Engineer
Los Angeles County Project Planning
Los Angeles County Museum of Natural History
Los Angeles Department of Environmental Quality
Los Angeles Bureau of Sanitation
Office of the Mayor, Los Angeles, Energy Coordinator
Pasadena Office of Advanced Planning
Chino Hills Task Force
California Polytechnical State University
    Biological Science Department
City of Avalon Planning Department
City of Long Beach
    Board of Harbor Commissioners
    Port of Long Beach
    Long Beach Health Department
    Long Beach Marine Department
City Managers:

Brea	Fontana	Pomona
Cathedral City	Loma Linda	Redland
Chino	Montebello	Rialto
Coachella	Ontario	Riverside
Colton	Palm Springs	San Bernardino
Desert Hot Springs	Paramount	South Gate
Downey	Pico Rivera	

Mayor of Santa Barbara
County of Santa Barbara Board of Supervisors
Mayor of Carpinteria
Santa Barbara City Planning Commission
Santa Barbara City Attorney
Santa Barbara County Planning Commission
Santa Barbara County District Attorney
Santa Barbara Air Pollution Control District
City of San Luis Obispo Engineering Department
Port of San Luis Obispo Harbor Authority
San Luis Obispo County Planning Department
San Luis Obispo County Council of Governments
San Luis Obispo County Environmental Coordinator
Riverside County Administrator
Mayor of Riverside
Riverside County Board of Supervisors
San Bernardino County Air Pollution Control District
San Bernardino County Board of Supervisors
San Bernardino Road Department Administration
San Bernardino County Building and Safety
San Bernardino County Planning Commission
San Bernardino County Environmental Improvement Agency
Mayor of Palm Springs
Mayor of Beaumont
San Bernardino County Regional Parks Department
San Bernardino County Planning Department
San Bernardino County Association of Governments
Mayor of Indio
Mayor of Banning
Imperial County Board of Supervisors

Arizona

Maricopa County Board of Supervisors
Maricopa County Highway Department
Pima County Board of Supervisors
Pima County Planning Department
Yuma County Health Department
County Agents
Cochise County — Pinal County
Maricopa County — Yuma County
Pinal County Planning Department

New Mexico

Dona Ana County Board of Supervisors
Grant County Board of Supervisors
Hidalgo County Board of Supervisors
Luna County Board of Supervisors
Mayor of Albuquerque

Texas

City of Midland
City of Midland Energy, Inc.
City of El Paso
El Paso City/County Health Department
County Agents
Andrews County — Hudspeth County
Culberson County — Martin County
El Paso County

Miscellaneous

Planning Department, City of Boise, Idaho
City Clerk, Sidney, Nebraska

9.8 CIVIC GROUP PARTICIPATION

Brochures and background information on the proposed project, covering (1) preparation of the DES and FES, (2) terminal and pipeline engineering data, and (3) Sea Leg routing and oil spill contingency and cleanup plans, were mailed to Chambers of Commerce and civic clubs along the proposed project route. Offers were extended to conduct briefings, present programs, and provide material for group mailings. Special presentations were made to Rotary clubs, Kiwanis clubs, and Soroptomists clubs in the general vicinity of the Port of Long Beach. A 20-minute color slide show was prepared and made available for briefings and presentations. Following is a list of towns and cities in which Chambers of Commerce and civic clubs were invited through written correspondence and telephone contact to participate in

preparation of the DES and FES as a part of the consultation and coordination effort:

Edmonton, Alberta, Canada
Kitimat, British Columbia, Canada
Vancouver, British Columbia, Canada
Port Angeles, Washington
Seattle, Washington

California

Anaheim
Avalon
Brea
Carlsbad
Cypress
East Whittier
El Segundo
Fountain Valley
Garden Grove
Hawaiian Gardens
Huntington Beach
La Habra
La Mirada
Long Beach
Los Alamitos
Los Angeles
Norwalk
Oceanside
Orange
Oxnard
Placentia
Port Hueneme
Sacramento
San Bernardino
San Luis Obispo
San Pedro
Santa Barbara
Santa Fe Springs
Seal Beach
Signal Hill
Stanton
Whittier
Wilmington
Yorba Linda

Arizona

Ajo
Apache Junction
Arizona City
Avondale
Benson
Bisbee
Bowie
Buckeye
Bullhead City
Casa Grande
Carefree
Cave Creek
Chandler
Clifton
Coolidge
Douglas
Eloy
Florence
Fountain Hills
Gila Bend
Gilbert
Glendale
Goodyear
Hayden
Kearny
Lake Havasu City
Litchfield Park
Maryvale
Mesa
Miami
Nogales
Paradise Valley
Parker
Peoria
Phoenix
Pima
Safford
Scottsdale
Sierra Vista
Springerville
Tempe
Tolleson
Tombstone
Tucson
Willcox
Winkelman
Yuma

New Mexico

Albuquerque
Deming
Las Cruces
Lordsburg

Texas

Midland
El Paso

9.9 ENVIRONMENTAL GROUPS PARTICIPATION

Organized environmental groups in the four states that would be traversed by the pipeline portion of the proposed project, and several groups in the northwestern portion of the state of Washington, were contacted during the preparation period of the DES and FES. Brochures, letters, and background materials were sent to each and, in some cases, special meetings were conducted. Following is a listing of environmental groups which responded to the participation request for information, or sent representatives to meetings:

Advisory Commission of Arizona Environment
Arizona Association of Earth Science Clubs
Arizona Conservation Council
Arizona Desert Bighorn Sheep Society, Inc.
Arizona Historical Society
Arizona Rivers Coalition, Sierra Club
Arizona Wildlife Federation
Arizona Wildlife Refuge
Tucson Audubon Society, Arizona
California Council for Environmental and Economic Balance
Cherry Manor Home Owners Association-Long Beach, California
Concerned Citizens of Long Beach, California
Southern California Yachting Association, Los Angeles, California
California Marine Parks and Harbors Association, Inc.
B.O.A.T. - Boat Owners Associated Together, California
Clean Bay Cooperative, California
Clean Sound Cooperative, Washington
Conservative Associates for Development of Energy, Illinois
Environmental Conscience, Inc., Arizona
Friends of the Earth, California
Sierra Club-Washington, California, Arizona, New Mexico
Long Beach Area Citizens Involved, California
League of Women Voters-Washington, California, Arizona
Maricopa Audubon Society, Arizona
Olympic Peninsula Audubon Society, Washington
Outdoor Life, California
Southern Arizona Environmental Council
Southern Arizona Sportsman Association
Southern Arizona Wildlife Callers
University of Arizona Student Chapter, Wildlife Society
Yuma Valley Rod and Gun Club, Arizona
Texas Environmental Health Services, Austin, Texas

9.10 PRIVATE INDUSTRY CONSULTATION

In gathering technical information and other data for the preparation of the DES and FES, members of the technical analyses team contacted the following individuals and groups within private industry:

APV Corporation, Washington
ARCO Pipeline Company, California
Arizona Fuels Corporation
Arizona Public Service
Arizona Refining Company
Association of Engineering Geologists, Long Beach, California
Atlantic Richfield Company, California
Burlington Northern Railroad Company, Washington
Button Estes Ranch, Midland, Texas
California Independent Oil Producers Association
El Paso Centennial Museum, Texas
El Paso Natural Gas Company, Texas
Entra Corporation, California
Environmental Sciences Associates, California
Exxon Company USA, Inc., Texas
Exxon Pipeline Company, Texas
Goodyear Aerospace Corporation, California
Key Ship Company, California
Jacobson's Pilot Service, Long Beach, California
Mathematical Sciences Northwest, Inc., Washington
Mobil Pipeline Company, California
Northern Tier Pipeline Company, Washington
Curran Oil Company, Washington
PF Industries, Inc., Washington
Realty Executives, Arizona
San Diego Gas and Electric Company, California
Santa Catalina Island Company, California
Scharbauer Brothers and Company, Texas
Scharbauer Cattle Company, Texas
Simmons Oil Company, Texas
Southern California Edison
Southern Pacific Pipelines, California
Standard Oil Company of California
Standard Oil Company of Ohio
Sverdrop and Parcel and Associates, Inc., Arizona
Teamsters Union local representatives, California
Texas/Mexico Meter Service, Inc., Texas
Trans-Mountain Pipe Line Company, Ltd., Canada
Transportation Institute, Washington
Tucson Truck Terminal, Inc., ITT, Arizona
Uni Oil, Inc., Texas
Union Oil Company, California
Western Oil and Gas Association, California
Williams Brothers Engineering Company, Oklahoma
Woodward-Clyde Associates, Inc., California

9.11 CONTACTS WITH APPLICANT (Chronologically listed from date application received by the Department of the Interior)

1. 9 September 1975: Application of SOHIO Transportation Company: APPLICATION FOR OIL PIPELINE RIGHT_OF_WAY UNDER SECTION 28 OF THE MINERAL LEASING ACT OF 1920, AS AMENDED (30 U.S.C. S185).

Application for right-of-way across Federal lands for the construction and operation of 78.9 miles of oil pipeline, with a

general location map showing the location of the Federal lands in Riverside County, California, attached. The pipeline to be constructed will be a small portion of a major new proposed common carrier crude oil pipeline running from San Pedro Bay in California to the vicinity of Midland, Texas. When completed, the project will be comprised of approximately 1,000 miles of 30-inch and 42-inch pipeline: 669 miles extending from Ehrenberg, Arizona, to Jal, New Mexico, to be acquired by lease from El Paso Natural Gas Company, connected to the port at San Pedro, and to the terminus at Midland, with a total of approximately 340 miles of pipeline to be constructed or acquired in California, Arizona, and Texas. Approximately 126 miles of existing pipeline located in California may be acquired by lease or purchase from the Southern California Gas Company. When the survey of the proposed route is completed, maps will be filed, including a description and documentation of the related facilities.

2. 1 October 1975: Letter to J.L. Hellebrekers, SOHIO, Cleveland, Ohio, from Ed Hastey, California State Director, BLM.

Brief summary of basic facts contained in application, followed by: "From the foregoing it would appear to be premature for the Bureau to discuss the merits of processing SOHIO's application until such time as there has been a full disclosure of the facts."

3. 6 October 1975: Letter to William Lyons, Deputy Undersecretary, Department of Interior, from F.G. Garibaldi, President, SOHIO.

Clarification on questions involving use and impacts of proposed pipeline; construction of tankage; definition of project, etc.

4. 6 October 1975: Letter to F.G. Garibaldi from Roman H. Koenings, Assistant Director for Resources, BLM.

Acknowledges 6 October 1975 letter.

5. 30 October 1975: Washington, D.C. meeting between Department of the Interior, BLM, Corps of Engineers representatives, and SOHIO, El Paso, and Williams Brothers officials.

To inform Federal agencies of the project and establish agency roles and key contacts.

6. 6 November 1975: Sacramento, California, project briefing put on by SOHIO, El Paso, Williams Brothers, and Holmes and Narver officials for BLM and State of California representatives.

7. 10 November 1975: Letter to Robert E. Metzger, BLM, from Allen E. Tebbotts of Ball, Hunt, Hart, Brown and Baerevitz -- California attorneys for SOHIO.

Enclosing California Attorney General's opinion on required scope of CEQA requirements on EIR's for multistate projects.

8. 18 November 1975: Letter to J.L. Hellebrekers, SOHIO, from John J. Clifford, California BLM Environmental Coordinator.

Setting up a revised EIS schedule and a 4 December 1975 meeting between BLM and SOHIO.

9. 4 December 1975: Los Angeles, California, meeting between BLM, Corps of Engineers, and applicants SOHIO, El Paso, Williams Brothers, and Holmes and Narver.

Purpose of meeting to discuss content and timing of applicant's environmental assessment reports.

10. 16 December 1975: Letter from Robert E. Metzger, BLM, to Mr. J.L. Hellebrekers, SOHIO.

BLM comments on first Williams Brothers Environmental Assessment Report -- Volumes I and II.

11. 29 December 1975: Letter from William O. Knight, Williams Brothers to Jack Clifford, BLM.

Transmitting agenda of 7-8 January 1976 proposed environmental assessment report Federal agency review feedback meeting with SOHIO consultants.

12. 6-8 January 1976: Phoenix, Arizona, meeting between BLM, Corps of Engineers and SOHIO, El Paso, Williams Brothers and Holmes and Narver representatives.

To review comments on applicant submitted environmental assessment reports.

13. 14 January 1976: Letter to J.L. Hellebrekers, SOHIO, from Robert E. Metzger, BLM.

Summary of major points discussed, approaches decided upon, and additional information needs; follow-up of a meeting in Phoenix of BLM and Corps of Engineers with applicant. Written for use of applicant in developing the final volumes of the environmental assessment.

14. 23 February 1976: Letter to J.L. Hellebrekers from Ed Hastey, BLM, California State Director.

BLM-Corps of Engineers specific review comments on the fourth interim report submitted by Williams Brothers Environmental Services on 2 February 1976, enclosed. Discussed the time schedule for the EIS project and stressed the need for a detailed, complete, specific project description at the earliest possible date.

15. 20 April 1976: Copy to John W. Lahr, BLM, of letter from Bob Schaadt, SOHIO, Long Beach, to George H. Spruce, Williams Brothers.

Confirming conversation regarding the nearly 170 questions developed by BLM-Corps of Engineers from interim submittals. Summarizes by groups of questions the time frame for completion of responses, and forwards Lahr's inquiry as to whether any of the pump stations would be located on state lands of Texas, New Mexico, or Arizona.

16. 14 May 1976: Letter to Bob Schaadt from Charles R. Tulloss, Project Manager, BLM, SOHIO Project.

Follow-up of telephone conversation on 13 May 1976, agreeing that contractor call Charles Tulloss when they needed to talk to the Williams Brothers regarding specific subjects.

17. 25 May 1976: Letter to Kenneth Blower, SOHIO, from Charles R. Tulloss.

Enclosing a list of 70 questions developed by the Technical Analysis Team in advance of the 2 June 1976 meeting with SOHIO and Williams Brothers at Los Alamitos, California.

18. 17 June 1976: Letter to Dr. George Lauer, ERT, Inc., from Jack Lahr.

Addendum to 15 June 1976 response to ERT Preparation Plan, stating that BLM had again requested SOHIO to provide the Hydrostatic Test Plan, Detailed Construction Plan, and Oil Spill Contingency Plan, even in draft segments; and listing considerations in further definition of "worst case" situation, for guideline, not limitation.

19. 24 June 1976: Letter to Charles R. Tulloss from R.E. Evans, Williams Brothers.

Comments responding to data requests on hydrostatic test plan, detailed construction plan, oil spill contingency plan, hydraulic studies.

20. 1 July 1976: Letter to Charles Tulloss, BLM, From Ken Blower, SOHIO.

Contained additional information on actual pipeline capacity out of Midland, Texas: Present capacity of 2,015,000 bbl/d leaving Midland with estimated potential economic expansion of pipeline system of 10 percent of present capacity.

21. 7 July 1976: Memo to File from Project Manager.

Subject: Telecon with Ken Blower (SOHIO) -- Status of Hynes negotiations. Information on terminal change premature because paperwork for purchase of Cal Trans site not complete.

22. 14 July 1976: Letter to Jack Lahr from Dr. George Lauer, ERT, Inc.

Summary of discussions of Dr. Lauer and Charles R. Tulloss with J.L. Hellebrekers and Ken Blower at Cleveland Office on 13 July 1976. Subjects covered included: air quality, tankers, Phase II and its relative impact, oil spill contingency plans, pipeline engineering data, administrative procedures.

23. 16 July 1976: Letter to Jack Lahr from Dr. George Lauer.

At the 13 July meeting in Cleveland, it was agreed that a set of questions would be provided by BLM (ERT) with respect to the SOHIO Oil Spill Contingency Plan, in lieu of an actual plan which will not be forthcoming until the end of September. Answers required by 30 July. Questions listed.

24. 19 July 1976: Memo to File from C.R. Tulloss.

Subject: Meeting in Cleveland with SOHIO officials. Topics discussed included the Hynes site which is still the choice -- Cal Trans site was a "good investment and a possible fallback"; Phase II; emissions from storage tanks; tankers; questions from Sierra Club regarding enforcement of mitigating measures, and authority over tanker emissions during the time tankers are tied to dock; pipeline Oil Spill Contingency Plan; pipeline route. Hydrostatic data to be sent soon from Williams Brothers.

25. 20 July 1976: Letter to Charles Tulloss from Robert E. Evans, Williams Brothers Engineering Co.

Enclosure: "Responses to Questions, Group 3."

26. 12 August 1977: Memo to Assistant Project Manager Jack Lahr from Project Manager Charles R. Tulloss.

Confirmation of understanding of oil spill discussion with SOHIO on 11 August 1976. Oil spill data that BLM and ERT have will be adequate for the DES. Draft of spill plan to be available in December for inclusion in FES.

27. 16 August 1976: Letter to Project Manager from M.F.G. Williams, SOHIO.

Answers to BLM questions concerning socioeconomic study of the Sea Leg of the SOHIO project.

28. 8 September 1976: Memo to Jack Lahr and Douglas Stone, BLM Economist, from Charles Tulloss concerning phone call from J.L. Hellebrekers 1 September 1976.

SOHIO is anxious that BLM use 450,000 bbl/d as the figure for backing out foreign oil instead of 200,000 for local markets.

29. 17 September 1976: Letter to Fran Bradley, SOHIO, Long Beach, from Michael W. Press, SOHIO, Cleveland.

Information in response to questions regarding cost of port and pipeline facilities, cost of tankers, costs from Midland, and four potential sources of tanker-related hydrocarbon emissions.

30. 23 September 1976: Memo from Public Affairs Officer to Assistant Project Manager.

Subject: Telephone conversation between Jack Lahr and Mike Williams 23 September 1976. Jack asked Mike about interim tankers SOHIO would be using. Mike said that since shipment of oil would begin in the summer of 1977 but the Long Beach terminal will not be

ready, SOHIO had chartered seven additional Jones Act tankers until 1980, specifically to go through the Panama Canal.

31. 24 September 1976: Letter to Jack Lahr from M.F.G. Williams, SOHIO.

Clarification of information with respect to the purging or gas freeing of hydrocarbon gas from cargo tanks after discharge of cargo.

32. 1 October 1976: Letter to Project Manager from Michael W. Press, SOHIO.

Summary of discussion at 28 September 1976 meeting of Los Alamitos project team and consultants with Michael Press on supply/demand project rationale, project scope, marine deliveries of sour crude to the Los Angeles Basin for local consumption, 1978 to 1980.

33. 14 October 1976: Memo to Project Manager and Assistant Manager from Public Affairs Officer.

Report of phone call to Mike Williams, SOHIO, for information on the tankers to be used to transport Alaskan crude oil from Valdez.

34. 14 October 1976: Memo to File from PAO.

Summary of highlights discussed in 28 September 1976 meeting of BLM and consultants with SOHIO representatives, held at Los Alamitos.

35. 22 October 1976: Memo to BLM State Director from Project Manager.

Report of meeting in Bullhead City, Arizona, on 14 October 1976, of Charles Tulloss, Jack Lahr, and SOHIO's Mike Williams with consultant Dr. George Lauer, who was working in that location. Meeting concerned purging and spills of tanker while unloading.

36. 2 November 1976: Letter to Project Manager from Mike Williams, SOHIO.

Summary of points on inert gas systems discussed in the Bullhead City, Arizona, meeting and at Los Alamitos.

37. 25 October 1976: Letter to Assistant Project Manager from Dr. George Lauer, ERT.

Summary of discussions held with Mike Williams, SOHIO, and BLM, one in Bullhead City, Arizona, and one at the Los Alamitos Project Office, Dr. Don Bright, Port of Long Beach, included in the latter.

38. 17 November 1976: Memo to Assistant Project Manager from Project Manager.

Summary of meeting with Corps of Engineers 16 November 1976, and of 17 November 1976 phone calls to Captain Charles Joyner, Corps of Engineers, and to Mike Williams, SOHIO. Topics discussed centered on project status and the proposed tanker route.

39. 22 November 1976: Memo to Project Manager from Assistant Project Manager.

Summary of phone conversation 19 November 1976 with Joe Hellebrekers, SOHIO, concerning budget for ES and time frame for production. Also discussed permits and problem with the Corps (Tetra Tech, Inc.) on tanker routing.

40. 2 December 1976: Memo to Assistant Project Manager from Project Engineer Matt Elliott.

Summary of information garnered from visit to Williams Brothers, in Tulsa, Oklahoma. Topics were alignment, pump station locations, transmission lines, design, Pier J, Colorado River crossing, pumps, valves, and Black Mountain pump station.

41. 5 January 1977: Letter to Ken Blower, SOHIO, from Project Manager.

Discussion of options available for the accomplishment of archaeological work necessary as a result of mitigating measures discussed in the DES.

42. 16 February 1977: Memo To Project Engineer from Project Manager.

Resume of points discussed in phone call to Joe Hellebrekers: Requests to Williams Brothers for data that may be new work; need for SOHIO/ERT/BLM meeting on recent studies by SOHIO; Southern California Gas Company abandonment problems; controversy over tanks on Pier J; need for a copy of the list of needed permits from Williams Brothers; probable need to meet with Williams and SOHIO on feasibility of pump station movement, power line.

43. 28 February 1977: Coordination meeting in Cleveland, Ohio, of Charles Tulloss and ERT representative with applicant.

44. 2 March 1977: Coordination meeting of BLM representatives, Charles Tulloss, Andy Wenchel, Landscape Architect, and Matt Elliott, Project Engineer, with Williams Brothers in Tulsa, Oklahoma.

9.12 PUBLIC PARTICIPATION MEETINGS DURING DES PREPARTION

Thirteen public informational briefings were conducted in California, Arizona, New Mexico, Texas and Washington concurrent with the DES preparation. The meetings were conducted informally and included presentations by the Bureau of Land Management and Corps of Engineers followed by a question-and-answer period and individual conversations. The public informational meetings were held as follows:

Texas		
Midland	7 June 1976	9 a.m. - Noon
El Paso	8 June 1976	9 a.m. - Noon
New Mexico		
Albuquerque	9 June 1976	9 a.m. - Noon
Arizona		
Phoenix	15 June 1976	10 a.m. - Noon
Phoenix	15 June 1976	7 p.m. - 9. p.m.
Tucson	16 June 1976	7 p.m. - 9 p.m.
Yuma	17 June 1976	7 p.m. - 9 p.m.
California		
Long Beach	22 June 1976	9 a.m. - Noon
Sacramento	24 June 1976	9 a.m. - Noon
Riverside	20 September 1976	9 a.m. - Noon
Palm Springs	20 September 1976	7 p.m. - 9 p.m.
Santa Barbara	29 September 1976	9 a.m. - Noon
Washington		
Seattle	28 July 1976	10 a.m. - Noon

These meetings were attended by 296 persons, who registered at the door. Those not registering, or declining to register, were not included in the count. Statements were presented by 30 persons and/or groups, and approximately 252 questions were recorded by the transcriber for submission to the ES analysis team to be used in preparation of the DES. Persons submitting written statements are listed below. Written statements were not submitted at all meetings.

Attendees	Affiliations
Midland Meeting	
Richard Brooks	Scharbauer Cattle Company
Charles G. Groad	Bureau of Economic Geology
Sue Bartow	Office of the Speaker, Texas House of Representatives
El Paso Meeting	
J. T. Bowen	Sierra Club
Bill Clayton, Speaker	Texas House of Representatives
Sarah Jane Dodds	Sierra Club
Albert D. Schutz, representing	Lt. Gov. W. P. Hobby
Rex White, Jr., Counsel	Texas Railroad Commission
Albuquerque Meeting	
Henry E. Kinney	Mayor
Daren L. Lucke, representing	Gov. Jerry Apodaca
Phoenix Meeting	
John Bannister, representing	Gov. Raul Castro
H. R. Garabrant	Arizona Corporation Comm.
Orme Lewis, Jr.	Natural Resource Consultant
F. H. Lathrop	Maricopa County Hwy. Dept.
Bruce R. Duke	Arizona Game and Fish Dept.
Yuma Meeting	
L. E. Brazeel, representing (County Manager)	Yuma County Board of Supervisors
A. J. Oschsner	Yuma County Board of Supervisors
Tucson Meeting	
John A. McComb	Sierra Club
Frances Werner	BLM State Advisory Board
Jim Rivers	Coronado National Forest

Long Beach Meeting

Frank Arundel	Cherry Manor Home Owners Association
Peter K. Ballou	Long Beach Area Citizens Involved
Ione Buie	Individual

Seattle Meeting

Michael Curran	Northern Tier Pipeline Co.
D. T. Durrant	Trans-Mountain Pipeline Co.
H. Kaelin	Olympic Peninsula Audubon Society
Paula Doherty	League of Women Voters
Leona S. Osterman	State Rep., 24th District

Palm Springs

William E Smith	United Mining Council of America

Santa Barbara

A.H. Scheyter, Jr.	University of California at Santa Barbara Environmental Studies Group.

Formal statements from governmental agencies in Arizona, New Mexico, and Texas were supportive of the proposed project. At the Sacramento, California, meeting most state governmental agencies were represented; however, no formal statements were made and no questions asked. Among the questions from the audiences during the public briefings were the following concerns:

1. Amounts of energy required for the pumping stations.
2. Water requirements for the terminals at Long Beach and Midland, and for the pumping stations.
3. Possible adverse environmental impacts on wildlife, aesthetics, and game refuges.
4. Oil spill potential in event of pipeline rupture.
5. Impact of abandonment of natural gas pipeline on supply of natural gas to California.
6. Possiblity of additional refineries in states to be crossed by pipeline.

7. Possibility of tie-ins to pipeline in Arizona and New Mexico for crude oil supply.

8. Number and types of alternatives being considered.

9. Employment potential in states and cities traversed by the proposed project.

A wide cross-section of groups, individuals, private sector and governmental agencies were notified in advance of the opportunity to participate in the public informational briefings. Notices were issued through daily and weekly newspapers, radio stations, television stations, and newsletters of organized groups. Individual letters of invitation were sent to governmental agencies, organized groups, legislative and Congressional representatives, and city and county officials.

More than 700 press releases were mailed in advance of each meeting, followed by a second notice to the press, and telephone calls to the newspaper, radio, and television station in the appropriate city. Special invitational letters went to 308 Federal, state, and local agencies in Washington, California, Arizona, New Mexico and Texas.

9.13 PRELIMINARY DISTRIBUTION OF WORKING DRAFT COPIES

Copies of the working draft of the first three chapters (Description of the Proposal, Description of the Environment, and Environmental Impacts of the Proposed Action), along with a preliminary list of mitigating measures and consultation and coordination contacts, were sent to the following agencies on 4 September 1976, with requests for review and return of comments:

BLM California State Office
BLM Arizona State Office
BLM New Mexico State Office
BLM Washington, Division of Lands and Realty
BLM Washington, Environmental Assessment Office

Federal Power Commission
U.S. Army Corps of Engineers, Los Angeles District
U.S. Fish and Wildlife Service
Federal Energy Administration, Region IX
Environmental Protection Agency, Region IX
U.S. Bureau of Reclamation
California Resources Agency
California State Lands Commission
California Coastal Zone Conservation Commission
California South Coast Regional Coastal Commission
California Energy Resources Conservation and Development Comm.
California State Water Resources Control Board
Los Angeles Regional Water Quality Control Board
California Department of Fish and Game
California Department of Parks and Recreation
California Public Utilities Commission
California Air Resources Board
New Mexico Environmental Improvement Agency
Port of Long Beach
Texas General Land Office
Texas State Office of Budget and Planning
Texas Railroad Commission
Sierra Club
El Paso Natural Gas Company
SOHIO Transportation Company

Informal comments received as a result of this distribution were incorporated, wherever possible, in the DES. Copies of the comments are on file in the BLM Project Office at Los Alamitos, California.

9.13.1 Supplemental mailing of preliminary mitigating measures

A supplemental mailing was made 10 September 1976 listing preliminary mitigating measures which are BLM-proposed, applicant-committed, or required by Federal law. Recipients were the agencies listed in Section 9.13 and below. Requests were made to (1) identify measures which each agency has the legal authority to implement; (2) indicate willingness of agency to implement such measures; (3) indicate availability of personnel to implement; and (4) list additional mitigating measures over which the agency has authority.

On 15 April 1977, most of these governmental units were given an opportunity to review again the proposed and committed mitigating measures to be listed in Chapter 4 of the FES. Transmittal of the measures was made by mail with a request to confirm or deny commitment.

On the basis of the request, it became possible to change the listing of many measures from "proposed" to "committed."

U.S. Department of Labor
Occupational Safety and Health Administration
U.S. Department of Transportation
U.S. Department of Interior
Bureau of Indian Affairs
National Park Service
U.S. Coast Guard
U.S. Department of Agriculture
Coronado National Forest
California Department of Conservation
California Department of Water Resources
California Department of Transportation
California Solid Waste Management Control Board
Southern California Air Pollution Control District
Palo Verde Irrigation District
Arizona State Land Commission
Arizona Department of Health Services
Arizona Water Commission
Arizona Corporation Commission
Arizona Highway Division
New Mexico State Lands Commission
New Mexico Fish and Game Department
New Mexico State Division of Health ;
New Mexico Water Quality Control Commission
New Mexico Oil Conservation Commission
New Mexico Highway Department
New Mexico Cultural Properties Review Commission
Texas Parks and Wildlife Commission
Texas Department of Health Resources
Texas Water Rights Commission
Texas Department of Highways and Public Transportation
Texas Historical Commission
Texas Air Control Board

Counties of:

Los Angeles, California	Riverside, California
San Bernardino, California	Yuma, Arizona
Maricopa, Arizona	Pinal, Arizona
Cochise, Arizona	Hidalgo, New Mexico
Grant, New Mexico	Luna, New Mexico
Lea, New Mexico	Dona Ana, New Mexico
El Paso, Texas	Hudspeth, Texas
Culberson, Texas	Winkler, Texas
Midland, Texas	Ector, Texas

Cities of:

Long Beach, California	Compton, California
Downey, California	Industry, California
Rialto, California	Colton, California
Fontana, California	San Bernardino, California
Loma Linda, California	Redlands, California
South Gate, California	Beaumont, California
Banning, California	Chino, California
Blythe, California	
Casa Grande, Arizona	Phoenix, Arizona
Tucson, Arizona	Willcox, Arizona
Jal, New Mexico	Anthony, New Mexico
Midland, Texas	El Paso, Texas
Pico Rivera, California	Pomona, California
Ontario, California	Lordsburg, New Mexico

9.14 COORDINATION IN THE REVIEW OF THE DRAFT ENVIRONMENTAL STATEMENT

The Draft Environmental Statement was filed with the Council on Environmental Quality (CEQ) on 24 November 1976 and was distributed to the Federal, state, local and private agencies listed in Table 9.14-1.

Table 9.14-1

DES Distribution and Comments Record

AGENCY	Distribution DES	Summary
FEDERAL		
DEPARTMENT OF THE INTERIOR		
Office of Land Use and Water Planning	X	
Office of Water Research and Technology	X	
Office of Oil and Gas	X	
Bureau of Indian Affairs*		
Phoenix Area Office	X	
Albuquerque Area Office		X
Northern Pueblos Agency		X
Sacramento Area Office	X	
Palm Springs Area Field Office	X	
Southern California Agency	X	
Bureau of Mines		
Liaison Officer, Phoenix	X	
Liaison Officer, Austin	X	
Liaison Officer, Albuquerque	X	
Geological Survey*		
Western Region	X	
Conservation Division (Los Angeles)	X	
Fish and Wildlife*		
Environmental Coordination Branch	X	
Division of Ecological Services	X	
Arizona State District Office	X	
Division of River Basin Studies (Phoenix)		X
Region 2 (Albuquerque)	X	
Kofa Game Range	X	
National Park Service*		
Western Regional Office (San Francisco)	X	
Western Archaeological Center (Tucson)	X	
Southwestern Regional Office (Santa Fe)	X	
Bureau of Outdoor Recreation*		
Albuquerque Regional Office	X	
San Francisco Regional Office	X	

*Asterisks indicate that review comments were received by BLM.

Table 9.14-1 (Continued)

AGENCY	Distribution DES	Summary
Bureau of Reclamation*		
Mid-Pacific Region (Sacramento)	X	
Southwest Region (Amarillo)	X	
Lower Colorado Region, (Boulder City, NV)	X	
DEPARTMENT OF THE NAVY*		
Marine Corps:		
Base Natural Resources Office, Camp Pendleton	X	
Office of Oceanographer	X	
12th Naval District (San Diego)	X	
DEPARTMENT OF COMMERCE*		
Office of Field Operations	X	
Maritime Administration	X	
Pacific Northwest	X	
Western Region	X	
DEPARTMENT OF LABOR*		
Occupational Safety and Health Administration	X	
DEPARTMENT OF STATE		
Environmental Affairs	X	
DEPARTMENT OF TRANSPORTATION*		
Materials Transportation Bureau		
Coast Guard Districts		
Juneau, AK	X	
Seattle, WA	X	
Long Beach, CA	X	
San Francisco, CA	X	
Federal Highway Administration:		
Phoenix, AZ	X	
San Francisco, CA	X	
Santa Fe, NM	X	
Federal Aviation Administration	X	
DEPARTMENT OF AGRICULTURE*		
Office of Environmental Quality Activities	X	
Farmers Home Administration	X	

Table 9.14-1 (Continued)

AGENCY	Distribution DES	Summary
Forest Service*	X	
Regional Forester, San Francisco	X	
Coronado National Forest	X	
Regional Forester, Albuquerque	X	
Rural Electrification Administration	X	
Soil Conservation Service:		
Arizona	X	
New Mexico	X	
Riverside, CA	X	
Water Conservation Laboratory, Phoenix, AZ	X	
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE*		
Office of Environmental Affairs	X	
Regional Office, San Francisco	X	
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT*		
Office of Environmental Planning	X	
Region IX, San Francisco	X	
Los Angeles Area Office	X	
ADVISORY COUNCIL ON HISTORIC PRESERVATION*	X	
ENVIRONMENTAL PROTECTION AGENCY*	X	
Region IX, San Francisco	X	
Region X, Seattle	X	
Region VI, Dallas	X	
ENERGY RESEARCH & DEVELOPMENT ADMINISTRATION		
Office of Environment & Safety	X	
FEDERAL ENERGY ADMINISTRATION		
Region IX, San Francisco	X	
Region X, Seattle	X	
Federal/State Liaison Office, Austin, TX	X	
ENERGY RESOURCES COUNCIL	X	
FEDERAL POWER COMMISSION*	X	
INTERSTATE COMMERCE COMMISSION		
Office of Proceedings	X	
Region 5, Fort Worth	X	
Region 6, San Francisco		X

Table 9.14-1 (Continued)

AGENCY	Distribution DES	Summary
GENERAL ACCOUNTING OFFICE		
Los Angeles Regional Office	X	
MARINE MAMMAL COMMISSION	X	
CANADA		
U.S. Consulate General, Vancouver, B.C.	X	
Environmental Protection Service, Vancouver, B.C.	X	
Canadian Consulate General	X	
STATE		
ALASKA*		
Office of the Governor	X	
Department of Natural Resources	X	
Department of Environmental Conservation	X	
ARIZONA*		
Arizona Corporation Commission	X	
Department of Economic Planning and Development	X	
Bureau of Mines	X	
Department of Administration	X	
Department of Transportation	X	
Water Commission	X	
Department of Revenue	X	
Environmental Planning Commission	X	
State Lands Commission	X	
State Highway Commission	X	
State Department of Game and Fish	X	
Planning and Zoning Commission	X	
Department of Health Services	X	
CALIFORNIA*		
Office of Planning and Research	X	
Attorney General	X	
Air Resources Board	X	
Public Utilities Commission	X	X
Coastal Zone Conservation Commission (Long Beach and San Francisco)	X	
Department of Fish and Game (Long Beach)	X	
Resources Agency	X	
State Water Resources Control Board	X	
State Lands Commission	X	
Energy Resources Conservation & Development Commission	X	
Divisions of Mines & Geology	X	
Department of Conservation	X	
Department of Transportation	X	
Department of Navigation and Ocean Development	X	
Department of Water Resources	X	
Regional Water Quality Control Board, Los Angeles	X	

Table 9.14-1 (Continued)

AGENCY	Distribution DES	Summary
NEW MEXICO*		
State Planning Office	X	
State Lands Office	X	
Environment Improvement Agency	X	
Highway Department	X	
Fish and Game Department	X	
State and Interstate Stream Commission	X	
TEXAS		
Office of Budget and Planning	X	
Lieutenant Governor	X	
Office of Federal-State Relations	X	
State Lands Commission	X	
Energy Advisory Council	X	
Permian Basin Regional Planning Office	X	
Department of Highways and Public Transportation	X	
General Land Office	X	
Department of Health Resources	X	
Historical Commission	X	
Industrial Commission	X	
Parks and Wildlife Commission	X	
Railroad Commission	X	
Water Rights Commission	X	
Water Quality Board	X	
Air Control Board	X	
Public Utilities Commission	X	
WASHINGTON*		
Office of the Governor	X	
State Energy Office	X	
NEW YORK		
Coastal Zone Coordinator	X	
COUNTY		
CALIFORNIA		
County Administrator:		
Los Angeles	X	
Orange	X	
Riverside	X	
San Bernardino	X	
San Diego	X	
Santa Barbara	X	
County Executive, Ventura	X	
San Diego County Comprehensive Planning Organization	X	
Santa Barbara County-Cities Area Planning Council	X	
Energy Coordinator, San Bernardino	X	
Environmental Center, San Luis Obispo County	X	

Table 9.14-1 (Continued)

AGENCY	Distribution DES	Distribution Summary
Los Angeles Regional Water Quality Control Board	X	
Board of Supervisors, San Francisco		X
ARIZONA		
Administrator, Pinal County	X	
Board of Supervisors:		
Graham County	X	
Pima County	X	
County Manager:		
Cochise County	X	
Maricopa County	X	
Yuma County	X	
Central Arizona Council of Governments	X	
Southeast Arizona Governments Organization	X	
NEW MEXICO		
County Manager:		
Dona Ana County	X	
Grant County	X	
Hidalgo County	X	
Lea County	X	
Luna County	X	
Board of County Commissioners, Eddy County	X	
Southeastern New Mexico Economic Development District		X
Southern Rio Grande Council of Governments	X	
Southwest New Mexico Council of Governments	X	
TEXAS		
Board of Commissioners:		
Culberson County		X
Ector County	X	
El Paso County	X	
Hudspeth County	X	
Midland County	X	
Winkler County	X	
West Texas Council of Governments	X	
CITIES		
CALIFORNIA		
Port of Long Beach Environmental Affairs	X	
City Administrator, San Bernardino	X	
City Clerk, Los Angeles	X	
City Attorney, Los Angeles	X	

Table 9.14-1 (Continued)

AGENCY	Distribution DES	Distribution Summary
Mayor, Santa Barbara		X
City Planning Commission, Santa Barbara	X	
Planning Division, Downey	X	
City Manager:		
Banning	X	
Beaumont	X	
Blythe	X	
Chino	X	
Colton	X	
Compton		X
Downey		X
Fontana		X
Loma Linda		X
Long Beach	X	
Ontario		X
Pico Rivera		X
Pomona		X
Redlands	X	
Rialto		X
South Gate		X
ARIZONA		
Town Council, Ehrenberg	X	
City Manager:		
Casa Grande	X	
Coolidge	X	
Phoenix	X	
Tucson	X	
Willcox	X	
NEW MEXICO		
City Manager:		
Anthony	X	
Deming	X	
Jal	X	
Lordsburg	X	
TEXAS		
City Manager:		
El Paso	X	
Midland	X	

Table 9.14-1 (Continued)

AGENCY	Distribution DES	Summary
PRIVATE ORGANIZATIONS/INDIVIDUALS		
Southern California Air Pollution Control District, El Monte, CA	X	
California Native Plant Association	X	
League of Women Voters, San Luis Obispo	X	
Morro Bay Audubon Society	X	
Santa Lucia Sierra Club	X	
Sierra Club:		
Los Angeles	X	
Southwest Representative	X	
Grand Canyon Chapter	X	
National Headquarters	X	
Friends of the Earth:		
San Francisco, CA	X	
Manhattan Beach, CA	X	
Seattle, WA	X	
Maricopa Audubon Society	X	
Tucson Audubon Society	X	
Defenders of Wildlife		X
Tucson Environmental Committee		X
Environmental Council of Arizona		X
Nature Conservancy	X	
Arizona Wildlife Federation	X	
Arizona Desert Bighorn Sheep Society	X	
Arizona Archaeological Soc., Inc.	X	
Arizona Environmental Education Council, Inc.		X
Southern Arizona Environmental Council	X	
University of Arizona, Office of Arid Land Studies		X
Colorado River Indian Tribes	X	
Southern Pacific Pipelines, Inc.		X
Sergent, Hauskins, Bechwith, Engrs.	X	
New Mexico Oil & Gas Association		X
New Mexico Conservation & Coordination Council		X
City of Midland Energy, Inc.	X	
El Paso Electric Company		X
Mitre Corporation	X	
Clean Sound Cooperative	X	
Olympia Peninsula Audubon Society	X	
League of Women Voters, Port Angeles	X	
Burrard Clean of Vancouver, B.C.	X	
Environmental Protection Service, West Vancouver, B.C.	X	
Trans Mountain P/L Co.	X	
British Columbia Petroleum Assoc.		X
California Office of Indian Legal Services	X	
Southern California Association of Governments	X	
Arizona Sunset, Quartzsite, AZ	X	
Kadison, Pfaelzer, Los Angeles	X	
Science Applications, Inc.	X	
Mechanics Research, Inc.		X
Engineering Decision Anal.	X	
Rutger's University Law School	X	

Table 9.14-1 (Continued)

AGENCY	Distribution DES	Distribution Summary
PRIVATE ORGANIZATIONS/INDIVIDUALS (Continued)		
Shell Oil Company, Houston	X	
Technical Associates, Inc.	X	
Mathematical Sciences NW, Inc.	X	
Truitt, Fabrihant, Bucklin, Lenzner, Washington, DC	X	
Debevoise & Liberman, Washington, DC	X	
Lion Oil Company, Los Angeles		X
Aerospace Corporation, Los Angeles	X	
Southern California Edison Co.	X	
Environmental Science & Engineering, Los Angeles		X
Lane Magazine & Book Co., Menlo Park, CA		X
Orange County Evening News, Garden Grove, CA		X
Southern Pacific Pipelines, Los Angeles		X
Powerline Oil Company, Santa Fe Springs, CA	X	
Pipeline & Gas Journal, Dallas, TX	X	
Tucson Cactus & Botanical Society, Oracle, AZ	X	
British Petroleum Alaska, Inc., Anchorage, AK	X	
PACE, Long Beach, CA		X
CBS News, Los Angeles		X
Arthur D. Little, Inc., Cambridge, MA	X	
Mobil Oil Corporation, Ferndale, WA	X	
Daniel, Mann, Johnson & Mendenhall, Los Angeles		X
Woodward-Clyde, Consultants, San Francisco	X	
Lawrence Livermore Laboratory, Livermore, CA	X	
Mobil Oil Corporation, Denver, CO	X	
Forbes Magazine, Beverly Hills, CA		X
Newsweek, Los Angeles		X
Dun's, Costa Mesa, CA		X
Superports, of California, Concord, CA	X	
Western Oil & Gas Assn., Los Angeles	X	
Kaiser Industries, Sacramento, CA	X	
Engineering Science, Arcadia, CA	X	
City News Service, Los Angeles		X
Environmental Feasibility Sta., Los Angeles	X	
Spencer-Roberts Assoc., Long Beach, CA	X	
Williams Brothers Engineering Co., Tulsa, OK	X	
Casa Grande Dispatch, Casa Grande, AZ	X	
USC Sea Grant Marine Advis. Program, Wilmington, CA	X	
Southern California Gas Co., Los Angeles	X	
Western Oil & Gas Assoc., Los Angeles	X	
California Gas Producers, Los Angeles		X
Winzler & Kelly, Piedmont, CA	X	
Holmes & Narver, Anaheim, CA	X	
Exxon Company, Los Angeles	X	
Lockheed Marine Biology Laboratory, Carlsbad, CA	X	
Atlantic Richfield Corp., Los Angeles	X	
Equitable Environmental Health, Inc., Woodbury, NY	X	
Liddell, Sapp, Zivley & Brown, Houston, TX	X	
KING TV, Seattle, WA		X
Cleveland Plain Dealer, Cleveland, OH		X
Long Beach Area Chamber of Commerce	X	

Table 9.14-1 (Continued)

AGENCY	Distribution DES	Distribution Summary
DEPOSITORY LIBRARIES		
ALASKA		
State Law Library, Alaska Court System	X	
Alaska Department of Education Library	X	
University of Alaska, Anchorage	X	
CALIFORNIA		
Occidental College (Los Angeles)[a]	X	
Pepperdine University	X	
California State College	X	
California State Library	X	
California State University:		
Fullerton	X	
Long Beach	X	
Los Angeles	X	
Sacramento (Science & Tech. Dept.)	X	
University of California:		
Los Angeles	X	
Riverside	X	
Santa Barbara	X	
Berkeley	X	
University of Redlands	X	
University of Southern California	X	
Los Angeles County Law Library	X	
Orange County Law Library	X	
San Bernardino County Free Library	X	
Ventura County Library	X	
Anaheim Public Library	X	
Long Beach Public Library	X	
Los Angeles Public Library	X	
Loyola University Law Library	X	
Riverside Public Library	X	
Rosemead Library[a]		X
San Bernardino Public Library	X	
San Luis Obispo City-County Library	X	
Santa Ana Public Library	X	
Santa Barbara Public Library[a]	X	
ARIZONA		
University of Arizona Library, Department of Physics[a]	X	
Phoenix Public Library	X	
Tucson Public Library	X	
Yuma City-County Library	X	

[a] Not an official depository.

Table 9.14-1 (Continued)

AGENCY	Distribution DES	Summary
NEW MEXICO		
New Mexico Junior College, Hobbs	X	
New Mexico State Library	X	
New Mexico State University Library	X	
New Mexico Supreme Court Law Library	X	
University of New Mexico	X	
Western New Mexico University	X	
TEXAS		
Angelo State University (Texas)	X	
University of Texas, El Paso	X	
Texas Tech University, Lubbock	X	
Texas State Law Library	X	
Texas State Library	X	
University of Texas Law Library, Austin	X	
OKLAHOMA		
East Central University, Ada, OK[a]	X	

9.15 DES AVAILABILITY

Notice of Availability of the Draft Environmental Statement appeared in the Federal Register on 24 November 1976. The review period began on the date the notice appeared.

One thousand copies of the DES and 3,000 copies of the Executive Summary were printed. A copy of the Executive Summary was included with each DES, and, in addition, 1,800 copies of the Summary were distributed separately.

Copies of the Draft Environmental Statement were available for inspection at the following locations:

Office of Public Affairs, Bureau of Land Management
Interior Building, 18th and C Streets, N.W.
Washington, D. C. 20240
Telephone: (202) 343-5717

Public Affairs Office, Bureau of Land Management
Room E-2853, 2800 Cottage Way, Sacramento, California 95825
Telephone: (916) 484-4724

Public Affairs Office, Bureau of Land Management
2400 Valley Bank Center, 230 N. First Ave, Phoenix, Arizona 85073
Telephone: (602) 261-3831

Public Affairs Office, Bureau of Land Management
Room 2220, U.S. Post Office and Federal Building
South Federal Place, Santa Fe, New Mexico 87501
Telephone: (505) 988-6243

U.S. Army Corps of Engineers, Los Angeles District
Library, Room 6650, 300 N. Los Angeles St., Los Angeles 90053
Telephone: (213) 688-5405

Office of Public Information, Federal Power Commission
Room 1000, 825 N. Capitol Street
Washington, D. C. 20426
Telephone (202) 275-4006

Environmental Affairs Office, Port of Long Beach
6th Floor, Long Beach Harbor Administrator Building
925 Harbor Plaza, Long Beach, California 90801
Telephone: (213) 437-0041

Public Affairs Office, Bureau Of Land Management
Building 55, Los Alamitos Naval Air Station
Los Alamitos, California 90720
Telephone: (213) 431-2592

A limited number of single copies were available and could be obtained by writing to:

Public Affairs Office
Bureau of Land Management
2800 Cottage Way
Sacramento, California 95825

Public Affairs Office
Bureau of Land Management
2400 Valley Bank Center
230 N. First Avenue
Phoenix, Arizona 85073

Public Affairs Office
Bureau of Land Management
Room 2220, U.S. Post Office and Federal Building
South Federal Place
Santa Fe, New Mexico 87501

9.16 ORAL TESTIMONY RECEIVED AT HEARINGS

The schedule of public hearings also appeared in the Federal Register on 24 November 1976.

Public hearings were held in Long Beach, Los Angeles, and Blythe, California; Midland and El Paso, Texas; Phoenix, Arizona; Albuquerque, New Mexico; and Seattle, Washington, during the period 4 January to 7 January 1977. The hearings were held for the express purpose of receiving views, comments, and suggestions from anyone. At the conclusion of comments of each witness, members of the hearing panel asked questions in the interest of clarifying testimony.

Three hundred fifty people attended the eight public hearings. Fifty-seven speakers offered oral statements which were transcribed by a reporting service in each location. The transcripts totaled 382 pages including the written statements. A complete transcript of each public hearing, including the written comments, is available for public inspection at the Department of the Interior, Bureau of Land Management, California State Office, Sacramento, California. Transcripts and written statements were forwarded to appropriate technical analysts for consideration and/or inclusion in the Final Environmental Statement.

Administrative Law Judges William J. Truswell and E. Kendall Clarke, from the Department of the Interior Office of Hearings and Appeals, conducted the hearings. A panel of officials representing the Bureau of Land Management, the United States Army Corps of Engineers, and the Office of the Secretary of the Interior, received the testimony.

Themes noted in the statements made at the public hearings include:

1. Concern about oil spills in the terminal area and pipeline spills or leaks that would pollute groundwater and/or endanger wildlife, particularly if oil entered the water at stream crossings.

2. The effect of the pipeline and ancillary constructions on wildlife conservation, especially in the Kofa Game Range area.

3. Damage to aesthetic values by transmission lines.

4. Opposition to a terminal in the central California coast.

5. Apprehension about the increased ship traffic inside the Santa Barbara Channel or outside the Channel Islands.

The following persons submitted testimony at the eight public hearings:

Long Beach, California

James Tatum
Richard Sayers
C. Freeman Allen
Jay B. White
Robert G. Ward
V. Faure Rilliet
Bob McHale
Roy Darrce
Stephen Miljevich
Admiral R.I. Price
Frank H. Arundel
Don May
Gilbert H. Bishop
Prabhu Nam Singh
Kurt Kupper
Charles P. Slocombe
Gregory Smith
Ray Pellatin
Richard Jacobsen
Joe Valenci
S.D. "Tex" Williams
H. Douglas Lemons

Phoenix, Arizona

Oreme Lewis, Jr.
Frank Sherer
Governor Raul Castro
Kevin Dahl
Bradley Vandermark
Harry Braun
Ernest Garfield
T.W. Heligoss
Louis Barassi
Jim Begley
George Schade
Marsha Cosentino
Jim Rivers
Brian Evans

Los Angeles, California

Roger Holt
Alvin C. Askew
Frank T. Slaton
Larry Espinosa
James Kutz
Jack Forrest
Jeannette M. Finch
Edward E. Butler
Arthur Braslow

Albuquerque, New Mexico

John F. O'Leary

Seattle, Washington

Eloise Kailen
Norma Turner
William A. Brewer
Keith Sherman

Midland, Texas

Ed Thompson
Ned Brooks

Blythe, California

Gary A. Bryce
Gerald D. Smith

El Paso, Texas

Sue Bartow
Joe Ventura
Jess Daffron, Jr.
David F. Mackie
Bob Armstrong
John Colburn

9.16.1 Specific comments and responses excerpted from oral testimony

The following comments are those presented by speakers at the various hearings which directly related to the adequacy of the Draft Environmental Statement and which were not testimony supplied by the speaker. Responses to all written comments on the DES, either received at the hearings or through the mail, can be found following the various letters printed in this volume.

1. Marsha Consentino, Phoenix hearing

Comment: "Additionally, I feel the discussion on railroads is extremely weak [in Chapter 8]. As a matter of fact, there's very little time devoted to that in the document."

Response: The discussion of the alternative to utilize railroad shipment of oil has been revised and expanded in Section 8.3 of the FES.

2. Jeanette Finch, Creative Educational Center, Los Angeles hearing.

Comment: "The data I have are revelant to the proposed pump station in San Timoteo Canyon Road in Redlands.

The report indicated that Smiley School was the nearest school which is a mile away. We are relatively new and perhaps that is why we didn't get considered in the report.

Creative Educational Center is approximately three-tenths; maybe a little bit less than three-tenths of a mile from the proposed pump site."

Response: Section 3.1.11.2.1 has been revised to include this school in the identification of potential noise impacts. A proposed mitigating measure has been included in Section 4.3.3 for landscaping of the proposed pump station to reduce visual and noise impacts.

3. William A. Brewer, Director Washington Research Center, Chairman of Pacific Oil and Ports Group, Seattle hearing.

Comment: "In the Environmental Impact Statement, a reference was made to segregated ballast, and particularly a proposal by BLM to use segregated ballast as a mitigating measure for the introduction of air pollution in the Long Beach area. The implication in the EIS is that BLM would be satisfied with partial segregated ballast capacity. That is something less than full segregated ballast on the SOHIO tankers utilizing this facility. . . . I will state that the Pacific Oil and Ports Group has done the staff work for this statement and also believes that this would be a very desireable feature for any federal agency to adopt in dealing with the unloading of crude at any West Coast port."

Response: A requirement for fully segregated ballast has been added in Section 4.2.2 of the FES.

4. <u>Keith Sherman, Director Washington State Energy Office, Seattle hearing</u>

Comment: ". . . on Page 8-27 [of the DES], the first paragraph, you mentioned the law pertaining to our restriction on tanker movements in Washington State's waters, and you say that we do have a law. In fact, we do. The law has been found unconstitutional by a district court, and the decision rendered by that court is now on appeal to the U.S. Supreme Court. . . . the law is, in fact, being enforced today and will be enforced until a final decision out of the U. S. Supreme Court. That particular paragraph in the statement is a little bit incorrect, a little bit inaccurate."

Response: The mention of the Washington State law has been qualified in Section 8.2.2.1 of the FES to state that the law is currently under judicial appeal.

Comment: "On Page 8-29, the second paragraph, there is a reference made to Nisqually Flats and Tacoma Narrows as being in the Upper Puget Sound. Those of us who live in the area would take slight issue with that. They are in the Lower Puget Sound, a very minor point."

Response: This statement has been corrected in the FES.

Comment: "On Page 8-35, the last line, the Northern Tier proposal calls for -- the statement in the document says that the Northern Tier Pipeline will transit Fort Lewis or part of Fort Lewis, Washington, and that's incorrect. The proposal provides for

completely missing the Fort Lewis military reservation. It will be outside the Fort Lewis property, and east, I think, to correct."

Response: Reference to Fort Lewis has been deleted in Section 8.2.3.2 of the FES.

Comment: "On Page 3-38, the North Central line corridor proposal, which initially provided for a pipeline from somewhere in the Northwest to Chadron, Nebraska, is mentioned as one of the alternatives. It possibly could still be considered an alternative; but as far as this part of the country is concerned, it is no longer what we consider a viable proposal. In any event, there is no application or indication on the part of SOHIO, the Burlington Northern, or anyone else, that that proposal will, in fact, be followed through on."

Response: Discussion of this route was retained as a possible alternative in Section 8.2.4.1 of the FES.

5. <u>John Colburn, Sierra Club, El Paso hearing</u>

Comment: "We are unable to determine from the EIS exactly how close the pumping station is to the [Hueco Tanks State] park, other than the foreground visibility zone as stated on Page No. 4-46. It is stated on Page No. 3-309 that pump station noise will be annoying up to 3,000 feet away and farther in areas of low background noise. If the pump station is this close to the park, the noise level would be even more annoying in a park setting and another reason for moving the pump station."

Response: The distance of the El Paso Pump Station from Hueco Tanks State Park has been clarified in Section 3.1.10.3 of the FES (approximately 1.5 miles). No noise impacts were identified for

this station due to the distance from the Park. A mitigating measure is proposed in Section 4.3.6 to move the station 1 mile west to reduce visual impacts.

Draft statements were also mailed to various congressmen, state legislators and individuals in the affected states, as requested.

9.17 COMMENTS RECEIVED AND RESPONSES

A total of 120 letters and written testimonies were received during the review period of the Draft Environmental Statement and at the public hearings of the DES. Comments were received from 27 Federal, 19 state, and 9 local governmental agencies, 26 private organizations and groups, and 39 individuals. Some agencies and individuals submitted more than one letter.

Comments in 65 letters or written testimonies raised substantial questions concerning the adequacy of the Draft Environmental Statement. These comments have been marked and numbered in the letters printed in the following sections. Itemized responses to these comments are presently following each letter. The remaining 55 letters or written textimonies expressed general opinions about the project rather than specific comments on the adequacy of the DES. These are printed in the following section without responses.

In some cases letters contained introductory or concluding statements reiterating specific comments contained within the body of the letter. Such redundant comments were not responded to. Also, several letters contained comments on the Executive Summary of the DES. Although these comments were considered in the finalized Executive Summary, this document is not considered a formal part of the Final Environmental Statement and thus, the comments were not responded to.

Questions and comments were received on virtually all sections of the DES. Those topics discussed frequently in the letters included: air quality impacts in the Los Angeles Air Shed, at Midland, and at Valdez; the supply of natural gas to California; the risk of tanker accident and oil spills in Prince William Sound and Southern and Central California coastal areas; impacts of pump stations and power lines; alternatives, especially those involving no pipeline construction from the West Coast; and earthquake hazards.

Many letters and written testimonies were received from agencies, organizations, and individuals in the Los Angeles-Long Beach area and Texas expressing general support for the project largely due to economic reasons. Several letters from the Long Beach area expressed disapproval of the project because of environmental reasons. Many letters were received from Central California residents expressing opposition to any alternative port location along the Central California Coast. Several letters were received from Arizona residents indicating both support and opposition to the proposed pipeline.

Approximately 450 pages of specific comments were received from the applicant (SOHIO) and the applicant's consultant (Williams Brothers Engineering Company). Only the introductory letter is printed in the following section. Itemized responses were not prepared for these comments. Many of these comments supplied, corrected, or updated specific technical material or data which was incorporated into Chapter 1 of the FES. Most of the remaining comments pointed out text errors or dealt with impact analyses as they related to more recent project data or information, such as route alignment, location of pump stations, location of check valves, etc. Many of the suggested changes based on refinements of the project design in engineering or more recent or relevent data were incorporated into the FES analysis.

A number of concerns and comments of the applicant dealt with mitigating measures. Chapter 4 of the FES has been substantially revised and several proposed mitigating measures have now been committed or have been deleted based on subsequent communications with the applicant and concerned agencies.

9.17.1 Federal Governmental Units

Advisory Council on
Historic Preservation
1522 K Street N.W.
Washington, D.C. 20005

January 7, 1977

Mr. Ed Hastey
State Director
Bureau of Land Management
Federal Office Building
2800 Cottage Way
Sacramento, California 95825

Dear Mr. Hastey:

This is in response to your request of November 22, 1976 for comments on the draft environmental statement (DES) for the crude oil transportation system from Valdez, Alaska to Midland, Texas.

1 Pursuant to its responsibilities under Section 102(2)(C) of the National Environmental Policy Act of 1969, the Council has determined that this DES is incomplete because it does not demonstrate compliance with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f, as amended, 90 Stat. 1320) nor Executive Order 11593, "Protection and Enhancement of the Cultural Environment" of May 13, 1971, with regard to this proposal.

However, the Council notes that the Bureau of Land Management (BLM) is aware of its responsibilities for compliance with these requirements. Therefore, if this transportation route is approved the Council looks forward to working with BLM in accordance with the "Procedures for the Protection of Historic and Cultural Properties" (36 C.F.R. Part 800) as appropriate.

Sincerely yours,

Louis S. Wall
Assistant Director, Office
of Review and Compliance

The Council is an independent unit of the Executive Branch of the Federal Government charged by the Act of October 15, 1966 to advise the President and Congress in the field of Historic Preservation.

RESPONSE

Comment #1

As discussed in Section 4.2.8, following the completion of cultural resource surveys the identified resources shall be evaluated in terms of the National Register of Historic Places criteria as set forth in 36 CFR 800. Following this evaluation, consultation with each of the affected State Historic Preservation Officers shall be initiated. Based on the consultation, mitigation plans shall be developed for review by the Advisory Council on Historic Preservation.

DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20250

JAN 24 3 59 PM '77
FEDERAL POWER COMMISSION

January 21, 1977

Mr. Kenneth F. Plumb
Secretary
Federal Power Commission
Washington, D.C. 20426

Dear Mr. Plumb:

We have had the draft environmental statement for the Crude Oil Transportation System: Valdez, Alaska, to Midland, Texas, reviewed in the relevant agencies of the Department of Agriculture, and comments from Agricultural Research Service and Soil Conservation Service, both agencies of the Department, are enclosed. Forest Service, also an agency of the Department, will communicate with you directly if it has any comments.

Sincerely,

EKRETT DECK
Coordinator
Office of Environmental Quality Activities

2 Enclosures

RECEIVED
JAN 27 1977
OFFICE OF ENERGY PROJECTS

AGRICULTURAL RESEARCH SERVICE

Comments on Draft Environmental Statement - Crude Oil Transportation System: Valdez, Alaska, to Midland, Texas

In general, this Draft Environmental Statement appears to be a well prepared document, and all of the potential hazards seem to have been addressed.

Section 5.12.4 summarizes the agricultural acreage affected by this proposal. It is stated that irrigated and dryland farming would only be temporarily affected by the soil disturbance. This is probably true provided some consideration is given to backfilling the trenches so that no unproductive material occurs at the surface. Elsewhere in the document, it is stated that a system of double trenching will be used to insure no permanent hazard to the productivity of the disturbed area. The permanent loss of acreage to grazing due to the permanent right-of-way does not seem unreasonable.

1 In connection with the cultivated lands, it is important that the line be well marked. Even though the depth of the pipeline is below that disturbed by normal agricultural operations, it could be affected by installation of tile lines or drainage ditches.

Consideration has been given to erosion control during the construction process and the post-construction period. If carried out as indicated, no significant adverse effects should occur. In general, the cleanup and restoration procedures proposed for the disturbed areas seem adequate.

2 It is difficult to assess the agricultural impact of potential air pollution. If ambient standards are rarely exceeded under the proposed normal operations, there should be little significant effect. Under abnormal conditions (spills, etc.) where standards are exceeded, there could be some vegetative damage in the vicinity.

The major area of concern here deals with problems related to possible leakages. Losses resulting from leakages could be great, with a significant impact on both surface and ground waters (Sections 5.5.2 and 5.5.3). In addition, it is possible that significant areas of soil can be contaminated for long periods of time. Biological degradation of oil in the soil is very slow. Cleanup of contaminated water is very difficult. We cannot evaluate the detection systems available nor the contingency procedures to be adopted in case of a spill or leakage, but we strongly urge that careful consideration be given to an evaluation of both.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Washington, D. C. 20250

We have reviewed the above subject statement submitted to us with your memorandum of December 22, 1976, and have the following comments.

In general, we agree that the movement of North Slope oil to deficit regions is important. A dependable supply of petroleum products for farmers in the Midwest will be required for sustained agricultural production at current levels.

Overall, the statement is very comprehensive, but somewhat inconsistent and repetitious. We are concerned that impacts on prime farmland, even though the amount in the project is limited, should be mentioned.

Additional specific comments are as follows:

1 3 Page 3-38, line 15. There is question about the meaning of the words "800 acres of soil with its 35 percent salt content water." Very few plant species survive when soil water contains more than 15 percent salt.

4 The discussion assumes that seawater (3.5 percent salt) would be used for the test. One possibility considered was to use freshwater (pages 1-111, 1-112, and 3-351), although the mitigating measure #3 on page 4-50 considers taking water from San Pedro Bay. Additionally, if seawater was discharged on soils with typical precipitation for the area, revegetation would probably not occur for decades, rather than two to five years.

5 2 Page 3-39, line 1. The salt concentration of 5,000 mg/l appears high for freshwater after flowing through the used gasline.

6 3 Page 3-52, line 5. The reference Chen et al, 1976 was not found on pages 3-401 or 3-402.

7 4 Page 3-259, line 3. We feel that the statement would be improved by changing the phrase to read "lateral movement would probably occur."

8 5 Page 4-4, Item 4.1.4.2. We feel it is unlikely that a silt screen will be used in the Colorado River, especially, in light of the discussion in paragraph four on page 5-9.

9 6 Page 8-2. The map shows Central America and South America east of their true location.

10 7 Attachment 1, pages 86 and 87. We feel the statement would be improved if these maps also showed the project location.

Gerald L. Lanman Acting

Gerold L. Lanman
Acting Director
Environmental Services Division

RESPONSE

Comment #1

Aboveground markers (posts) would be installed and maintained at intervals along the line where there is danger of interference by unassociated excavation or agricultural activities.

Comment #2

Comment was noted but no text change was believed to be needed.

Comments #3, #4 and #5

Since the draft was prepared, SOHIO has released a more comprehensive hydrostatic test plan that anticipates use of freshwater rather than seawater. See Section 1.2.3.2, Actions Following Construction, for a discussion of the hydrostatic test plan. Section 3.1.4.2.1, under Hydrostatic Test Water, has been revised accordingly.

Comment #6

The reference has been added to the FES.

Comment #7

The text was changed to reflect this comment in Section 3.1.8.2.2, under Operations (Aquatic).

Comment #8

This mitigating measure has been deleted.

Comment #9

Any planimetric map of such a large portion of the earth's surface is distorted; if longitudinal lines were depicted, they would be concave eastward.

Comment #10

Comment was considered but no map changes were believed to be necessary.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
CORONADO NATIONAL FOREST
Federal Building
301 West Congress
Tucson, AZ 85701

B410

JAN 14 1977

Project Manager
SOHIO EIS Project Office
P.O. Box 660
Los Alamitos, CA 90702

Gentlemen:

The Coronado National Forest is affected by about .7 of a mile of existing 30" pipeline in the Winchester Mountains. This line is located in Section 12, T13S, R22E, Cochise County, Arizona.

1 The draft statement does not indicate any actual work will be needed on this part of the pipeline. The District Ranger at Safford, Arizona, should be contacted in advance, if any work becomes necessary on this portion of the pipeline. The stipulations with the right-of-way to El Paso will need to be followed for any work on the Forest portion of the pipeline.

Our items of concern are:

1. Watershed restoration of disturbance by draining and reseeding.
2. Protection of other improvements, such as fences.
3. New access routes to the pipeline.
4. Vegetative removal and borrow areas.

Please contact us if we can be of further assistance.

Sincerely,

K. R. WEISSENBORN
Forest Supervisor

6200-11 (1/68)

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

P.O. Box 2417
Washington, DC 20013

2700
(8400)

Mr. Charles Tulloss
Project Manager
Bureau of Land Management
EIS Project Office
P.O. Box 660
Los Alamitos, California 90720

Dear Mr. Tulloss:

We have reviewed the Draft Environmental Statement for a crude oil transportation system from Valdez, Alaska, to Midland, Texas, as proposed by the SOHIO Transportation Company.

Less than 3 miles of the proposed pipeline crosses National Forest System lands. That crossing, within the Coronado National Forest, would utilize the existing pipeline and little or no additional impact is anticipated. Appropriate permits will be required for any change in use of the existing pipeline and the development or use of additional facilities associated with this proposal on National Forest System lands. The Forest Supervisor of the Coronado National Forest at Tucson, Arizona, will expect to review applications and develop suitable permit requirements. We understand that he has already furnished you with his comments on this proposal.

We are, however, interested in the potential tie-in with the development of the United States Navy's Elk Hills, California, National Petroleum Reserve, and its possible connection with the SOHIO project (Chapter 1, Description, section 1.4.1.1, page 1-153, item #3). This proposed Navy pipeline, from Elk Hills to Redlands, California, would involve the San Bernardino National Forest at Cajon Pass, and possibly a portion of the San Bernardino National Forest administered by the Angeles National Forest. We were aware that an Elk Hills to Redlands tie-in was being considered since a representative of Marmac System Engineering Company, a consultant to the Navy, had contacted the San Bernardino Forest. We were not aware that other lines (Elk Hills to San Francisco or Elk Hills to Port Hueneme) were also under study. Depending on routing, the Elk Hills to Port Hueneme route could affect the Angeles National Forest and/or Los Padres National Forest. To date, we have not had any official contact from the Navy.

6200-11 (1/68)

2

It should be noted also that other Forest Service Regions (R-1, R-6, and R-9) could be impacted should the National Petroleum Reserve #4 become available for development (section 1.4.1.2, page 1-154), or if the "Northern Tier" pipeline proposed from Port Angeles, Washington, to Clearbrook, Minnesota, is selected.

1 Chapter B of this DEIS discusses possible ports-of-entry and routing alternatives to the proposed action. We are concerned with the depth of analysis of impacts associated with the construction of the various routing alternatives. Agency decisionmakers and the public could better understand the potential impacts and tradeoffs involved with each alternative if alternative routes were located more specifically on maps, and if more complete assessment of environmental effects associated with each specific route had been undertaken. Lack of sufficient information prevents meaningful consideration of project routing alternatives. For example, any of the alternative ports and pipeline routes, as shown in Figure B.0-2, page B-5, if selected, could result in impacts to National Forest land in Regions 1, 2, 4, 5, 6, and/or 9.

Of the seven alternative ports and pipelines, four are located on the California coast. Our comments cover the proposed alternative pipeline routes as they might affect the Forests in the California Region, Region 5.

1. Estero Bay, California to either Midland, Texas, nr Sidney, Nebraska (page B-9). The Central route (Sidney, Nebraska) would impact the Tahoe National Forest (page B-10) and possibly Region 4 in the Wasatch Range in Utah. The link from Estero Bay to Redlands, California (page B-10), would involve the San Bernardino National Forest (Cajon Pass) if a tie were made into the main proposed SOHIO line at Redlands.

2 There is confusion in our minds as to whether the Estero Bay-to-Midland corridor would or would not cross the Los Padres National Forest, as there are conflicting statements on pages B-46 and B-47. Also, as this alternative is described, it would not seem to pass "in the vicinity" of the Sisquoc Condor Sanctuary, as stated on page B-47.

2. Avila Beach/Oso Flaco (San Luis Obispo Bay) California. The Avila Beach and Oso Flaco ports would be linked by pipeline either to Midland, Texas, or Sidney, Nebraska (page B-5), as previously discussed under #1 above.

3 The Avila and Oso Flaco alternative pipeline route appears to describe a route north of State Highway 166 through the Los Padres National Forest. Impacts to National Forest lands are not addressed. The report (page B-55) states that this proposed alternative corridor (San Luis Obispo Bay to Sidney, Nebraska) follows existing rights-of-way through the Tahoe National Forest. We are unaware of what rights-of-way are being followed. This route as described would also traverse an area between Cache and Wasatch National Forests (Region 4).

RESPONSE

Comment #1

Sections 3.1.12.1, Arizona, and 3.1.12.3, Arizona, have been changed to reflect this comment.

3

Between Rawlins and Laramie, Wyoming, the corridor passes within two miles of the Medicine Bow National Forest (Region 2). Also, the corridor passes through five miles of an unnamed National Forest in Region 2 between four and ten miles southwest of Laramie (page 8-56 and 8-57).

3. Port Hueneme/Oxnard, California. This site would be linked to Midland, Texas, by pipeline largely following the routes described for the Estero Bay (#1 above) and Avila/Oso Flaco (#2 above) alternatives. As described on page 8-61, it would involve crossing the San Bernardino National Forest (Cajon Pass) to tie back into the SOHIO proposed route near Redlands.

4. Camp Pendleton, California. As described on pages 8-64 and 8-65, this alternative pipeline appears not to involve any National Forest lands in the link from Camp Pendleton to the Midland Corridor.

4 We understand an additional port alternative at Guadulupe Dunes has been proposed in public meetings held by the State of California. Since this alternative would also cross the Los Padres National Forest, tie into Elk Hills, cross Cajon Pass on the San Bernardino National Forest, and tie into the proposed pipeline route at Redlands, we feel it should be covered in the final environmental statement along with the other alternatives potentially affecting the central California coast.

In summary, we believe the final environmental statement should more completely discuss both possible links with other proposed pipeline systems, such as Elk Hills, and also all reasonable alternatives. The reader should be helped to more clearly understand the cumulative effects of the many currently proposed pipeline systems - oil and gas. Information on the effects and tradeoffs among alternative routes is needed to more comprehensively comply with the intent of NEPA and current CEQ direction.

We appreciate the opportunity to review and comment on this draft environmental statement.

Sincerely,

for R. MAX PETERSON
Deputy Chief

RESPONSE

Comment #1

Chapter 8 has been extensively reorganized, incorporating more environmental detail, with maps showing national forests.

Comment #2

Revision of Chapter 8 states that if Estero Bay is the port site, a pipeline to either Sidney, Nebraska, or Midland, Texas, would skirt north of the Los Padres National Forest. The other alternative central California port sites of Avila Beach, Oso Flaco, or Guadalupe Dunes would traverse the Los Padres National Forest.

Comment #3

Please refer to the response to Comment 2 above. In projecting alternative pipeline corridors, the multiple use of existing transportation and utility corridors, such as transmission lines, pipelines, railroads, and highways would generally minimize impacts rather than create a new corridor. However, the FES recognizes that the I-80 corridor through the Tahoe National Forest and Cache/Wasatch National Forest is very constrained and sensitive to impacts.

Comment #4

Guadalupe Dunes has been added to Chapter 8 as an alternative central California port site.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
3008 Federal Building, Phoenix, Arizona 85025

December 29, 1976

Project Manager
Bureau of Land Management
Project Office
P. O. Box 660
Los Alamitos, California 90720

Sir:

The Arizona State Office of the Soil Conservation Service, USDA, has reviewed your Draft Environmental Impact Statement and Executive Summary for the Crude Oil Transportation System; Valdez, Alaska, to Midland, Texas. We are pleased to note you propose using 789 miles
1 of an existing natural gas pipeline system in this project. The DEIS should make clear if any prime farmland will be impacted wherever new construction takes place. State offices of the Soil Conservation Service could assist you in determining the extent of prime farmland involved.

We appreciate the opportunity to review this draft environmental impact statement.

Sincerely,

For:

Thomas G. Rockenbaugh
State Conservationist

Enclosures (2)
Perspectives on Prime Lands
Recommendations on Prime Lands

RESPONSE

Comment #1

Agricultural land has been discussed in Sections 2.1.12 and 3.1.12 and delineated in Attachment 1 under Planned Land Use Map 2.1.13.

UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Science and Technology
Washington, D.C. 20230

January 25, 1977

Mr. Ed Hastey
Bureau of Land Management
U. S. Department of the Interior
Federal Office Building
280D Cottage Way
Sacramento, California 95825

Dear Mr. Hastey:

The draft environmental impact statement for "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (as proposed by Sohio Transportation Company)", which accompanied your letter of November 1976, has been received by the Department of Commerce for review and comment. The statement has been reviewed and the following comments are offered for your consideration.

General Comments

1 A formula for the relationship between slick, current, and wind velocity was provided; wind roses for all seasons and for each area of the tanker route would have been most useful. These wind roses are readily available from the Pilot Chart series of the Defense Mapping Agency.

2 A quantitative summary of tidal currents using tables and/or diagrams would be most useful. Detailed tidal current information is provided for Long Beach Harbor and for selected offshore locations along the tanker route in "Tidal Current Tables, 1977, Pacific Coast of North American and Asia," NOS, NOAA, U.S. Department of Commerce.

Geodetic control survey monuments may be located along the proposed pipeline route. If there is any planned activity which will disturb or destroy these monuments, the National Ocean Survey requires not less than 90 days notification in advance of such activity in order to plan for their relocation. NOS recommends that funding for this project includes the cost of any relocation required for NDS monuments.

2.

3 In light of the many potential hazards to the environment this project could create, there is a need for continuous monitoring of the operational marine and land legs of the system. This need is not addressed in the draft environmental impact statement (EIS) but should be. It further should be the responsibility of SDHID to provide for this function as is the case with Alyeska and the Trans-Alaska pipeline system.

Realizing the tremendous impact that weather will have on tankers transiting between Valdes and Los Angeles, these vessels will benefit greatly by participating in the National Weather Service (NWS) Cooperative Ship Observation Program. Providing observations on sea and swell, wind speed and direction, weather, etc. for this program will provide the NWS with critical additional data that should subsequently improve the marine forecasts for vessels in these areas.

4 The proposed project could potentially have long-term effects upon Long Beach's ability to function as a nursery and spawning area for a variety of marine fish species. Adequate discussion has not been developed concerning the combined effects of: increased turbidity, nutrient enrichment of surrounding water, displacement of fish species, loss of habitats, and redeposition of suspended sediments, all of which are expected problems resulting from the proposed dredging. Discussion of the combined effects of dredging should be directed towards those areas of the Long Beach Harbor which are known to be conducive to larval development and will be affected either directly or indirectly by the proposed dredging operation.

5 The exposure of marine organisms to potential oil spills within or near the Long Beach Harbor during those periods of their life cycles in which they are most vulnerable to oil toxicity (i.e. larval and juvenile stages) has not been completely discussed. Specifically, the possible alteration of long-term community structure should be considered.

3.

6 An area of particular concern to this Department's Maritime Administration (MarAd) is the degree of inconsistency between this document and MarAd's Office of Policy and Plans' recent study of the Alaskan trade,"The U.S. Flag Tanker Fleet and Domestic Carriage Requirements - An Assessment of Fleet Adequacy"- Maritime Administration, Office of Policy and Plans, October 21, 1976, with regard to the issue of tanker requirements. The MarAd study has received fairly wide distribution and its findings are fully incorporated in the recently released Federal Energy Administration (FEA) study of the Alaskan oil trade. As a consequence, we feel that it is important to note where the EIS findings are different from the MarAd study.

7 The EIS notes that the SOHIO estimate of the amount of shipping needed to accommodate a 700,000 barrel per day throughput from Valdez to Long Beach is 11 vessels aggregating 1,340,000 DWT. In its own separate assessment the Bureau of Land Management concluded that the operating assumptions used by SOHIO were probably overly optimistic and felt that 14 vessels would probably be needed. Although the Bureau did not indicate the aggregate capacity of its fleet, if the vessels were on average the same size as those included in the SOHIO fleet, the 14 vessels would aggregate about 1.7 million DWT. Using the operating assumptions outlined in the MarAd fleet assessment, the aggregate fleet deadweight required to serve this 700,000 barrel per day movement has been calculated to be about 1.5 million DWT.

In performing its environmental impact assessment the Bureau used its own larger fleet requirements figures. Although these figures are slightly higher than our own, they are, in our view, sufficiently close to be within the range of reasonable error. In assessing environmental impact, we feel that the necessity to adopt conservative assumptions supports the use of the larger figures. Because of these considerations we do not feel it is necessary to urge any revision of the figures used in the EIS itself. We do, however, feel that the discrepancy is worth mentioning in conjunction with our other comments simply so that the difference may be noted in the EIS review record.

4.

8 The text is replete with poor sentence structures, misspelled and improperly used words and meaningless sentences. The errors are too numerous to list, so only a few are selected as examples. On page 2-156, paragraph 2, this sentence is found: "Generally phosphate values are lowest in the upper mixed layer with a sharp rise in the pycnocline increasing to a maximum value normally just below the oxygen minimum with a gradual decrease to the sea bottom." In the next paragraph, it is stated that: "High values have recorded around San Francisco,...." On page 2-157, paragraph 1, the word resolution is used incorrectly.

The information provided in subsequent sections is clear, concise, and relevant. In particular, section 2.1.5.1.3 Port Area, could be used as a model for the way sections 2.1.5.1.1 and 2.1.5.1.2 should be written.

Executive Summary

On page VIII-5 we note that, under the discussion of the Panama Canal transshipment option, the issue of tanker availability is cited as the most critical factor affecting the viability of this particular option. Since the principal conclusion of the MarAd Alaskan oil assessment was that the fleet would be more than adequate to accommodate the surplus via Panama, we feel that this point should be made. In the body of the EIS, on page 8-16, this same issue is raised but is treated more fully by including a brief summary of the MarAd study findings. In our view, the same approach should be followed in the Executive Summary. The necessary revision perhaps could be most easily accomplished by simply including the last paragraph from page 8-16 on page VIII-5 as well. We feel that this change will provide those who read only the Executive Summary of the paper with a more accurate view of the Panama Canal option.

On page IV-5 the Bureau recommends that appropriate agencies take steps to permit only vessels having a minimum of 20 percent segregated ballast to use the proposed Long Beach berthing facilities and to require that all ships using these facilities use bunker fuel with no more than 5 percent sulfur content for off loading operations. While the vessels SOHIO now intends to use in this trade will meet these requirements, it might be worth considering how much system flexibility in terms of vessel substitution and bunker availability might be sacrificed through the adoption of such restrictions.

5.

Chapter 1

9 Page 1-2 - The total length of pipeline of 1,026 miles does not agree with the total of 1,013 miles in Figure 1.

10 Page 1-2, last paragraph to 1-3 - Midland will have 400,000 bbl/d idle capacity but would be receiving 500,000 bbl/d. An explanation is needed as to how the excess 100,000 will be accommodated.

11 Page 1-3, paragraph 3 - This entire paragraph is confusing. Clarification is needed as to the second natural gas line, the existing natural gas line and the new line (not discussed elsewhere). Why does abandonment of the second gas line enable the new pipeline to accommodate 1 million bbl/d?

12 Figure 1.1.1.2-4 - The storage tank dimensions and capacity do not agree with the text on p. 1-21.

13 Page 1-21, paragraph 2 - Are there any firefighting control and communications systems planned for the Long Beach terminal facility?

14 Page 1-21, paragraph 2 - How many acres are involved at the Long Beach facility? This needs to be stated here.

15 Page 1-24, paragraph 4 - How long is the projected life of the project if adequate maintenance has not been achieved or if a proper cathodic protection system is not used?

16 Page 1-111, paragraph 6 - Water will be obtained.

17 Table 1.3.1-1 (Page 1-136 thru 138) - This table lists those Federal agencies which have project approval requirements. No reference is given for the Coast Guard approval of the operation of the marine facility. This reference should be 33 CFR 154, Large Oil Transfer Facilities.

6.

Chapter 2

Chapter 2 - Description of the Environment
2.1.5 - Water Resources, Quality, and Use
2.1.5.1- Marine

The material provided in the first two sections, Ocean and Bays and Estuaries needs to be rewritten for the following reasons:

18 (a) The organization of topics is confusing. The description of Port Valdez (p. 2-150) belongs under 2.1.5.1.3 Port Area rather than under 2.1.5.1.2 Bays and Estuaries. Also, the topics "General Chemical Characteristics" and "Water Quality and Use" (p. 2-151 to 2-159) include information about the open ocean and waters near the coastline and yet they are under 2.1.5.1.2 Bays and Estuaries.

19

20 (b) Some of the material is irrelevant or unnecessary and appears to be included simply to provide text for an outline topic. For example, on page 2-158, it is stated that phosphate concentration in Southern California coastal waters is high in comparison to that of the Gulf of Maine and the English Channel. There are numerous other statements which do nothing but confuse the reader.

21 (c) Numerous errors and inconsistencies exist in expressing and converting units of measurement. On pages 2-144 and 2-145, under Water Temperature, temperature gradients are expressed in Fahrenheit and Celsius degrees, but the conversions are often wrong. A gradient or change of 2°C is equivalent to 3.6°F, not 35.6°F, as stated. On page 2-156, nitrate concentration units are stated to be milligram atoms per liter, which is 1000 times larger than the true unit, microgram atoms/liter. The units of other nutrients are abbreviated as mg/l, but this is not defined. They also should be microgram atoms/liter (ug-at/l).

22 Page 2-872 - Transportation networks are discussed and the vessel traffic in the Port of Long Beach is thoroughly analyzed. However, no mention is made of Port Valdez. This should be included so that a complete evaluation of the marine transportation network can be made.

7.

Chapter 3

23 Page 3-51, paragraph 3 (Metal and Nutrient Release) - The potential of passive uptake of resuspended sediments containing toxic materials in conjunction with normal feeding by filter feeding animals and the consequences of passing on pollutants through the food chain should be discussed.

24 Page 3-141, paragraph 3 (Dredging and Filling) - Some discussion concerning the possibility of magnifying a "red tide" condition if extensive dredging were to occur during spring or summer and the possibility of fish kills during this time period should be included in this section.

25 Page 3-174, paragraph 2 - A quantitative estimate as to the economic loss to the live-bait fishermen would provide additional information to assess the impact dredging would have on this particular fishery.

26 Page 3-176, paragraph 2 - Combined effects of dredging should be listed in this section.

27 Page 3-177, paragraph 1 - Alternative dredging techniques and their respective value in reducing dispersion of dredged materials should be listed. Selection of the appropriate technique should be included.

Chapter 5

28 Page 5-2, paragraph 1 (Oil spill potential hazards) - Annual spill figure of 1,221 barrels on ocean segment is misleading. Presumably this figure is based upon the value obtained from frequency of spill and amount spilled. However, "90 percent of spills are smaller than 1,000 gallons (about 25 barrels) and over 50 percent are smaller than 15 gallons." "On the other hand, most of the oil spilled comes from a few very large spills (Chapter 3, page 3-57)." The previous quotation implies that the potential annual spill is actually very small or very large, not the intermediate figure given (1,221 barrels).

29 Similarly, since a large percentage of spills occur close to near-shore areas (22.6% coastal and 22.2% at the entrance of harbors) where the most sensitive habitats occur (intertidal, mud flat, and marshes), the potential damage from a spill is much greater than is described.

30 The treatment of tanker navigation problems in Valdez Arms and in Prince William Sound is seriously lacking.

In late November, 1976 Mr. Charles Champion, Pipeline Coordinator for the State of Alaska, gave a briefing to the Council on Environmental Quality and to the Coast Guard in Washington which presented results of a real-time simulation of VLCC operations through the Valdez Narrows. The exercises were conducted at a training center in Holland with experienced VLCC officers. The results of those model operations suggested a high risk of a tanker casualty in Valdez Narrows under the present planned operational procedures. Valdez Narrows is an area noted for its violent and unpredictable weather changes.

31 The briefing suggested that problems include the serious lack of meteorological data, lack of trained VLCC officers, lack of experienced pilots, lack of large ship operational experience in Valdez Arms, inadequate navigation aids and operational plans and possible increasing iceberg problems in Prince William Sound. There should be a thorough discussion and analyses of these problems in the EIS.

32 We also call attention to the question of an adequate evaluation of tanker design for the Valdez-Long Beach marine leg. Valdez may be the world's first major semiarctic port which will be loading hot oil cargo (140°-150°F). We suggest that a review of the adequacy of ship design should include discussion of any potential structural problems which could result in winter from loading a "cold" VLCC hull to her marks in a few hours time with a hot oil cargo at 140°-150°F and then, within a few more hours, driving that ship at a normal rate of speed into a heavy sea condition in Prince William Sound or the Gulf of Alaska. Is there sufficient operating experience with VLCCs in conditions of this type to insure their safety? Will all plates, frames, braces and other structural members have reached an expansion equilibrium in the short turnaround time so as to not suffer undue stress and possible failure under the described severe sea conditions? These questions should be considered in the EIS.

9

Appendices

33 Appendix A1.1.1.1 is a discussion of inert gas systmes on tankers. Table A1.1.1.1-2 in this appendix gives the principal characteristics of the SOHIO tanker fleet. It should be pointed out, as it is in Table 1.1.1.1-1 on Page 1-8 of the EIS, that the 80,000 DWT tankers do not have the capability of inerting.

Thank you for giving us an opportunity to provide these comments, which we hope will be of assistance to you. We would appreciate receiving twelve (12) copies of the final statement.

Sincerely,

Sidney R. Galler
Deputy Assistant Secretary
for Environmental Affairs

Responses

Comment #1

Wind roses are included in the maps of Attachment 2. There is extensive new information incorporated in the FES on oil spill trajectories and estimated impacts.

Comment #2

Comment was considered, and no change was made in the FES.

Comment #3

Maintenance and monitoring of the pipeline are discussed in Sections 1.2.3.3 and 1.2.3.4 of the FES. Section 4.2.2 discusses a mitigating measure for monitoring in the port.

Comment #4

Sections 3.1.8.1.1 and 5.8.1 which consider impacts on port fauna have been revised and expanded. However, it was not possible to provide any additional quantifiable impacts on the combined effects of the various construction actions.

Comment #5

The discussion of potential oil spill impacts on marine fauna in the port area has been expanded substantially in Section 3.1.8.1.2, under Port of Long Beach.

Comment #6

The data contained in the Maritime Administration study were reexamined but found to be based on assumptions not specifically applicable to this proposal. No changes in tanker requirements were believed to be warranted in the FES.

Comment #7

As discussed in Section 1.1.1.1, under Sea Leg, the BLM calculations indicate 14 tankers would be required because of varying cruising speeds of the tankers and unexpected, but always possible, delays.

Comment #8

The text was changed to reflect the comments on Nutrients in Section 2.1.5.1.2.

Comment #9

The length of the pipeline project has been corrected throughout the entire document to 1,026.6 miles.

Comment #10

This is a market question, and is not included in Chapter 1, Description of the Project. This is discussed in Sections 2.1.16.5 and 3.1.16.5, Energy Supply/Demand.

Comment #11

The text has been clarified in Section 1.0, under Introduction and General Project Description.

Comment #12

This has been corrected on Figure 1.1.12-4.

Comment #13

Communication systems in the port area are described in Section 1.2.3.2, under Communication Systems. Changes in fire-fighting facilities are discussed in Section 3.1.17.

Comment #14

The inland terminal is 69 acres as indicated in Section 1.1.1, under Details of California Route. The Long Beach port facility is a 42-acre plot as indicated in Section 1.2.2.1, under Long Beach.

Comment #15

Under the existing Federal, state, and local regulations, proper maintenance and cathodic protection are integral parts of the project. These must be done for public safety as well as for environmental protection. The projected life of the project was not considered without these very important aspects.

Comment #16

This has been corrected in Section 1.2.3.2, under Testing.

Comment #17

This has been included in Table 1.3.1-1.

Comment #18

Several changes were made to clarify this section. However, some redundancy was unavoidable.

Comment #19

Several text changes were made to clarify this section.

Comment #20

A text change was made to reflect this comment.

Comment #21

Text changes were made to reflect these comments.

Comment #22

Vessel traffic into and out of Port Valdez is discussed in the Tanker Traffic Study, Appendix A1.1.1.1-A.

Comment #23

A discussion of impacts on port fauna as a result of dredging is contained in Section 3.1.8.1.1.

Comment #24

Much more research is needed to substantiate any correlation between dredging and filling activities and red tide conditions. Therefore, Section 3.1.7.1.1 has been changed to indicate that there is only a possibility that the dredging and filling could stimulate an increase in phytoplankton density and productivity due to nutrient release. A discussion of the extent of such a possible bloom has also been added to the section.

Comment #25

Section 3.1.8.1.1, under Dredging and Filling Activities, has been expanded to reflect these concerns.

Comment #26

The discussion on dredging effects in Section 3.1.8.1.1 has been expanded. The unavoidably adverse impacts of dredging are summarized in Section 5.8.1.

Comment #27

The discussion of minimizing dredging impacts has been deleted in Section 3.1.8.1.1, and an expanded discussion of dredging techniques has been included in Chapter 4, Mitigating Measures.

Comment #28

Tables 3.1.5.1.2-6 and 3.1.5.1.2-7 have been revised to clarify the question raised. Refer also to Appendix A1.1.1.1-A for additional methodology and data on tanker traffic impacts.

Comment #29

The Bureau of Land Management believes that these impacts are adequately discussed in the FES.

Comment #30

Additional discussion of tanker navigation problems have been added in the Tanker Traffic Study, Appendix A1.1.1.1-A and Section 3.1.5.1.2.

Comment #31

Navigation and iceberg problems in Prince William Sound have been added to the FES in the Tanker Traffic Study, Appendix 1.1.1.1-A.

Comment #32

This has not been identified in the FES as a potential problem. However, the applicant is currently investigating this and other technical aspects in a comprehensive study of their proposed tankers.

Comment #33

The inerting category was added to Table 1.1.1.1-1 in the FES.

DEPARTMENT OF THE ARMY
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS
630 Sansome Street, Room 1216
San Francisco, California 94111

REPLY TO ATTENTION OF

SPDPD-R

3 FEB 1977

Project Manager
EIS Project Office
Bureau of Land Management
U. S. Department of the Interior
P. O. Box 660
Los Alamitos, California 90720

Dear Sir:

This is in response to your undated letter in which you requested Corps of Engineers review and comments on the draft Environmental Statement for the crude oil transportation system from Valdez, Alaska, to Midland, Texas, as proposed by SOHIO Transportation Company. This letter shall serve as the consolidated response of the Corps of Engineers. The following are our comments:

1 a. Tetra Tech, Inc. of Pasadena, California, under contract to the Corps of Engineers has developed information concerning the sea-leg portion of the proposal. This data should be considered and incorporated as appropriate in the Final Environmental Impact Statement.

2 b. Possible impacts of the proposal on the nation's national security should be addressed.

3 c. Paragraph 1.3.1.2. in Chapter 1, Description of the Proposal, U. S. Army Corps of Engineers, should read as follows:

"The Department of the Army through the Corps of Engineers has discretionary permit authority under the following Acts to authorize work in navigable waters of the United States as well as other waters of the United States: Section 10 of the River and Harbor Act of 1899 (30 Stat 1151, 33 USC 403) requires permits for structures and deposit of dredge or fill material in navigable waters of the United States. The Outer

3 FEB 1977

SPDPD-R
Project Manager, Bureau of Land Management

3 Continental Shelf Lands Act of 1953 (67 Stat 463, 43 USC 1333(f)) extended the Section 10 authority to the limit of the Outer Continental Shelf in connection with artificial islands and fixed structures. In addition, Section 103 of the Marine Protection Research and Sanctuaries Act (86 Stat 1052, 16 USC 1432) requires permits for the transportation of dredged material for the purposes of dumping in ocean waters. Also Section 404 of the Federal Water Pollution Control Act Amendments of 1972 (86 Stat 816, 33 USC 1344) requires permits for the discharge of dredge or fill material in all navigable waters of the United States and other waters."

4 d. Chapter 2, reference 61, refers to the publication "California Nearshore Surface Currents" as being unpublished. This was published in Shore and Beach, Volume 43, October 1975, Number 2.

5 e. The discussion of wave conditions in Chapter 2 on pages 2-141 through 2-143 is inadequate. An understanding of wave climatology over the entire sea route is required for determining the design constraints and loadings for vessel and mooring configurations and designs. In addition, the efficacy of oil spill containment, and/or cleanup equipment, and/or procedures should a spill occur should be discussed. To overcome this deficiency, monthly and annual mean and maximum wave height summaries at 500-mile intervals along the routes to be traveled, along with graphical plots of these values should be given. This should be similar to wave height studies compiled by Draper of the United Kingdom for North Sea drilling certification. This information should be compared with the National Oceanic and Atmospheric Administration wave data buoys presently on station in the North Pacific.

6 f. Chapter 2, Section 2.1.12 should contain the recreational uses of the waters within the area being described as well as available recreation data.

7 g. Also, in Chapter 2, Section 2.1.5, Water Resources, the physical and biological characteristics of all streams on which the pipeline would result in a significant environmental impact should be described. A discussion of the lakes, ponds, and wetlands in or adjacent to the right-of-way should be included.

8 h. Chapter 3 contains a discussion of the probability of an oil spill. However, there is no discussion of cleanup considering environmental parameters and the state of oil spill cleanup technology. Chapter 4, page 4-4, mentions the applicant will prepare an oil spill contingency plan for the pipeline route and for the sea-leg prior to permit issuance. However, this should be discussed in the EIS.

3 FEB 1977

SPDPD-R
Project Manager, Bureau of Land Management

9 i. Chapter 5, page 5-9, states that "Temporary unavoidable impact would result from excavation and placement of new pipeline below the river bed at the Colorado River and Pecos River," and "A similar temporary impact would result at the Pecos River Crossing with displacement of around 3,000 to 4,000 cubic yards of sediment over an approximate 10-day construction period." To determine the need for a Section 404 permit, a more detailed explanation of the new pipeline installation is necessary. The explanation should include embankment excavation and backfill or protective treatment, if planned. If similar activities are planned for the Rio Grande, they should also be explained in detail.

10 j. Possible problems where the line passes through the Fort Bliss Military Reservation and Maneuver Area 2, an area under lease to the Department of the Army for maneuvering purposes, should be listed. The statement does not specifically mention these two important areas nor possibilities of adverse impacts caused by maneuvering troops and equipment on the pipeline and the consequences of pipeline rupture.

Thank you for the opportunity to review and comment on this Draft Environmental Statement.

Sincerely yours,

WILLIAM E. VANDENBERG
Colonel, CE
Deputy Division Engineer

RESPONSES

Comment #1

Relevant material from the Tetra Tech, Inc., study has been incorporated into the appropriate sections of the FES.

Comment #2

If national security is taken to mean reliance on foreign oil, Section 3.1.16.5, Energy Supply and Demand, discusses the impacts of the project on importation of foreign oil. Although the project would provide an overland method of distributing 500,000 barrels per day of crude oil from the West Coast to the Midwest, in contrast to a more "vulnerable" tanker route, the impacts to the national security for this amount of oil are considered minor.

Comment #3

Section 1.3.1.2, under U.S. Army Corps of Engineers, has been revised to reflect this comment.

Comment #4

The reference has been changed to reflect this comment.

Comment #5

Additional information on wave climatology has been included as Attachment 2, Maps 1 through 11.

Comment #6

Section 2.1.12.3 discusses recreational uses of land and water.

Comment #7

Water quality of various bodies of water where data are available is shown in Table A2.1.5.2. Significant and lasting impacts on biological components are identified in the wildlife and vegetation sections (3.1.8.2 and 3.1.7.2) only at locations where significant impacts are expected.

Comment #8

Oil spill contingency plans have been developed by the applicant and were considered in the discussion of impacts in Chapter 5 of the FES. See Chapter 1, Table of Contents, for availability of the plans.

Comment #9

The applicant has not submitted a detailed plan as to how he intends to construct the individual river crossings. A general statement was made in Section 1.2.3.2, under Water Crossings, and each crossing is identified in Table 1.2.3.2-2. Additional environmental analyses will be necessary prior to specific permit approval.

Comment #10

The chance of pipeline rupture within Fort Bliss or the maneuver area was considered no more likely than in any other open-space area. The pipeline is buried sufficiently deep to protect it from passage of Army equipment, such as tanks. Excavation during a maneuver within a well-marked buried utility corridor is considered very unlikely.

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP PENDLETON, CALIFORNIA 92055

IN REPLY REFER TO
RF5/LEC/ncg
4100.2
1 Feb 1977

Mr. Chuck Tulloss
Bureau of Land Management
SOHIO Project
P. O. Box #660
Los Alamitos, CA 90720

Dear Mr. Tulloss:

This Command objects to the alternative outlined in the draft Environmental Impact Statement which addresses the establishment of a crude oil pipeline through Camp Pendleton.

Subject crude oil pipeline is not compatible with a military training base and would have a disastrous effect on the mission of Camp Pendleton.

Sincerely,

PAUL L. V. CAMPO
By direction

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
P. O. BOX 3711
LOS ANGELES, CALIFORNIA 90053

SPLED-E

10 February 1977

Mr. Charles R. Tulloss
Project Manager
Bureau of Land Management
P.O. Box 660
Los Alamitos, California 90720

Dear Mr. Tulloss:

The Los Angeles District, Corps of Engineers, would like to offer the following additional comment concerning the Draft Environmental Statement for the SOHIO Project:

1 In order to measure the environmental effects that the SOHIO Project will have on the environment within San Pedro Bay and specifically the Port of Long Beach, the Corps proposes that a monitoring effort be initiated as a mitigative measure for the SOHIO Project. Such a monitoring program would measure and validate the SOHIO Project impacts on the marine environment, including preconstruction, post construction and operational impacts.

Thank you for the opportunity to comment on this Draft Environmental Statement.

Sincerely yours,

TAICHI L. NISHIHARA
Acting Chief, Engineering Division

RESPONSE

Comment #1

Because the SOHIO tankers utilizing the Port of Long Beach would only constitute a small part of the total number of ships that presently are using the port, it does not appear realistic to require the applicant to monitor the environmental impacts occurring in the harbor. Therefore, no text change was made.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

28 JAN 1977

OFFICE OF THE ADMINISTRATOR

Project Manager
Bureau of Land Management
P.O. Box 660
Los Alamitos, California 90720

Dear Sir:

The Environmental Protection Agency has completed its review of the Bureau of Land Management's (BLM) draft environmental impact statement (EIS) for the Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (as proposed by the SOHIO Transportation Company), issued November 1976. Our detailed comments are enclosed.

1 It is EPA's principal concern that air pollutant emissions, particularly hydrocarbons, associated with the SOHIO project be addressed in relation to EPA's interim policy (Interpretive Ruling for Implementation of the Requirements of 40 CFR 51.18), published in the Federal Register of December 21, 1976, establishing new source procedures for areas currently in violation of national ambient air quality standards (NAAQS). This interim policy requires that proposed new sources of air pollutant emissions, which would aggravate existing violations of an established NAAQS, be approved only after acceptable "emission offsets" are achieved or scheduled elsewhere in the non-attainment area.

2 EPA's emission offset policy will have specific application to those portions of the SOHIO project planned for the Long Beach terminal area and for the Midland - Odessa area where oxidant levels currently violate national standards. For instance, according to the draft EIS, the short-term impact of the SOHIO project is a predicted 25% increase in oxidant levels downwind of Long Beach under conservative "worst case" conditions. However, while the draft EIS acknowledges the requirements of EPA's offset policy, the EIS itself

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2 does not contain an adequate analysis of the prospects for the required emission offsets to be achieved. We believe the final EIS must provide a more definitive appraisal of from where the necessary offsets, for both Long Beach and Midland emissions, can be expected.

3 EPA is also concerned that the draft EIS underestimates the intermediate-term impact of the project. Most projections of West Coast crude oil surpluses show a surplus in excess of the capacity of this project by the early 1980's (pp. 1-6 of the draft EIS and p. 135 of the recently completed Federal Energy Administration study on the disposition of Alaskan crude oil). Thus the "expanded project scenario" analyzed in the draft EIS is likely to occur well before the year 2000 (the date chosen in the EIS). If an additional natural gas pipeline in converted, and necessary changes in pumping capacity are made, the number of ship calls at Long Beach could possibly double, resulting in increased tanker emissions and a higher accident risk in the Long Beach Harbor area.

4 The description of the existing air quality problem in the South Coast Basin (Chapter 2) is in need of additional discussion. We believe a most serious omission is the failure to describe the general control strategies being implemented under the California State Implementation Plan. It is important to understand, for example, that recent reductions in pollutant concentrations are the result of long anticipated actions by local, State and Federal air pollution control agencies to reduce emissions. Moreover, it is critical to realize that the public health in the South Coast Air Basin can only be protected if continued reductions in emissions of reactive hydrocarbons, NOx, total suspended particulates and other pollutants are achieved. Virtually all local agencies and a number of State and Federal agencies are currently involved in a basin-wide planning effort (Air Quality Maintenance Planning) to bring about further emission reductions. Any net increase in emissions, particularly of reactive hydrocarbons, will interfere with efforts to attain national ambient air quality standards and will reduce the options available in the planning processes now underway.

In addition to the above items, we have identified a number of areas in the draft EIS where either the air quality analysis presented requires much more thorough discussion or where such analysis ie actually lacking or in error. Our detailed comments address these items in a chapter-by-chapter breakdown and suggest steps which can be taken by BLM in the final EIS to improve the overall weaknesses now present in the air quality impacts discussion.

Regarding water quality impacts anticipated from the proposed project, EPA strongly recommends that the final EIS include the following items:

5 a) a complete description of terminal facilitiss to be located at Dominguez Hills, California (as discussed on pp. 1-13 of the draft EIS);

6 b) a comprehensive hydrostatic test program for the pipeline; and

7 c) details of the proposed oil spill contingency plan for dealing with pipeline ruptures or undetected leaks.

8 Aleo, the draft EIS indicates that 2.6 million cubic yards of bottom sediments will be dredged in the Long Beach terminal area. Of this 2.6 million cubic yards, 700,000 cubic yards will become part of the new breakwater and the remainder discharged at an offshore disposal site. This site should be identified as EPA Interim Dumping Site, Los Angeles #2. Public Notice No. 76-110, issued by the Los Angelee Oistrict Corps of Engineers for the dredgedmaterial to be discharged at Los Angeles #2, indicates that the dredged material may also be discharged at "an approved adjacent project site." The final EIS should idsntify thie site, what its purpose will be, how its use may modify those impacts attributed to the SOHIO project, and all other impacts which will result from the use of this alternate site.

9 We note that several portions of the BLM analysis were identified as not completed in time for incorporation in the draft EIS. These include an archaeological field survey and an overall analysis of the sea transportation

9 aspect of the project being prepared by the Corps of Engineers. Both of these items should be completed and incorporated into the final EIS.

10 In conclusion, the question of cumulative air quality impacts arising from the SOHIO project remains most important to EPA. The net increase in petroleum throughput, particularly at the Long Beach site, and the accompanying predicted emission increases in HC will aggravate air quality conditions in a present non-attainment area. These emissions may be possibly offset by proposed emission reduction from existing storage tanks and de facto reductions from less frequent petroleum importation using older, less-controlled tankers. Nevertheless, a careful discussion of cumulative sources and the relationship of proposed offsets to future air quality maintenance plane is necessary before EPA can evaluate the net effects of the project. At the present time, such an analysis cannot be made.

In accordance with EPA procedures, we have rated the draft EIS Category 3 (Inadequate). We urge BLM to improve the air quality impact discussion for the SOHIO project in the final EIS. Until additional information ie forthcoming regarding the prospects for, and location of, the necessary emission offsets, as well as information addressing our detailed air and water quality comments, EPA will be unable to assess many of the important environmental issues raised by this project.

Many of the mitigating measures suggested in Chapter 4 may evolve into permit conditions to be adhered to by SOHIO during the construction and operational phases of the project. Other proposed measures may be imposed on other entities flag vessels. Should the project be authorized to proceed by all relevant Federal, State, and local agencies, many complex and diversified guidelines, monitoring requirements, and inspection schedules will be imposed upon the project to assure environmental compatibility. EPA suggests that a Federal task force be considered by BLM for the overall coordination of the implementation of environmental requirements imposed on the project.

We appreciate the opportunity to review and comment on this draft EIS. Should you have any questions regarding our general or specific comments, or if we can provide any data necessary to the preparation of the final EIS, please let us know.

Sincerely yours,

Rebecca W. Hanmer

Rebecca W. Hanmer
Director
Office of Federal Activities (A-104)

Enclosure: Draft EIS Comments - D-BLM-A03067-00
Crude Oil Transportation System, Valdez
Alaska to Midland, Tedas (SOHIO
Transportation Company).

THE ENVIRONMENTAL PROTECTION AGENCY"S
DETAILED COMMENTS
ON THE
BUREAU OF LAND MANAGEMENT'S
DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE
CRUDE OIL TRANSPORTATION SYSTEM: VALDEZ,
ALASKA TO MIDLAND, TEXAS (AS PROPOSED BY
THE SOHIO TRANSPORTATION COMPANY)

General Comments

Although the estimated air quality levels resulting from the project vary significantly with the technical assumptions used, even the reasonably conservative "worst case" scenario used in the draft EIS results in a 25% increase in oxidant levels "downwind" of Long Beach. If the projected three tanker berths are built, an increase in petroleum throughput is almost certain and will probably occur within 10 years. This could mean even greater increases in the magnitude and frequency of current oxidant violations. EPA notes that the mitigating measures suggested by BLM are in the "proposed" stage and will generally require actions beyond the immediate control of either SOHIO or BLM. EPA must 11 therefore urge BLM to provide in the final EIS a more realistic discussion of the hydrocarbon emission offsets which will be necessary for the project to conform to EPA's policy regarding new source review in non-attainment areas (See discussion in the enclosed cover letter to these comments).

12 The draft EIS also projects that the SOHIO Project will result in the exceedance of national ambient air quality standards (NAAQS) for CO, TSP and SO_2 during the construction phase of the Long Beach facilities. The final EIS should address these additional potential NAAQS violations in relation to EPA's emission offset policy for non-attainment areas and should detail the mitigating measures to be adopted for the prevention of anticipated NAAQS violations.

13 BLM's discussion of this project's proposed expansion of port capacity (in contrast to the SOHIO oil transport portion of the project alone) needs additional analysis. The final EIS should include references for the assumptions made on the timing of the expected "expansion," the types of ships/activities which could use the facilities (in addition to SOHIO tankers), and the potential air quality impact of these ships/activities.

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14 The draft EIS notes that the transportation system facilities will not be limited to Prudhoe Bay oil, but may also be used for OCS and Elk Hills oil. The draft EIS does not discuss the impact of these other sources on the capacity of the system. The storage tanks and pipeline are sized on the basis of 500,000 bpd. As acknowledged in the draft EIS, SOHIO is considering a second phase which would increase the volume to 1.2 million bpd. The final EIS should address the possibility of other sources using the storage tanks and pipeline and the effects of this on the transportation of Alaskan oil and on the necessity for additional capacity in Long Beach at some near date. Such expansion of facilities will no doubt result in increased emissions from tanker offloading activities as well as an additional risk of tanker accidents in the Long Beach Harbor area. The final EIS should discuss in greater detail the impacts which could result if Long Beach terminal expansion occurs.

15 In addition to air quality impacts expected in the Long Beach area, there will be additional impacts at the Midland, Texas facilities due principally to emissions of hydrocarbons. Recent air quality data from the Midland-Odessa area show violations of the oxidant standard in Air Quality Control Region 218. The final EIS should therefore address the impact of the proposed Midland facilities on the oxidant standard for this region.

16 EPA notes that the emission inventory data used in the draft EIS was for 1972. This should be updated with at least 1973 data (or possibly even 1975 data) and should address the future trend of photochemical oxidant levels in the Midland region. In view of EPA's interim policy for new source review in non-attainment areas, and also in view of the current violations of the oxidant standard, the proposed Midland facility will be required to meet this policy. Additional information regarding proposed offsets should be included in the final EIS.

17 EPA feels that the possibilities of future petrochemical industrial development within the terminal site area at Midland, Texas are highly probable. It is known that the Permian Basin area of West Texas and New Mexico contain

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17 enough refineries to refine approximately 300,000 barrels per day of crude oil. With the dwindling of oil reserves in the Permian Basin area, it may be reasonable to conclude that Alaskan crude will replace the lessening amounts of Permian crude. It is also anticipated that the storage of 2,000,000 barrels of Alaskan crude oil at the Midland facilities will encourage further development of the petroleum industry in this area because of the ease of accessibility and the potential economic benefits that can be contributed to this area by further development. Therefore, a possible future development of the petroleum industry in the Midland-Odessa area and the possible impacts it will have on the environment should be included within the final statement.

EPA notes that, to date, there has not been a comprehensive air quality impact analysis performed for oil transport activities at the Port of Valdez. BLM has referenced in the draft EIS a study by Environmental Research and Technology (ERT) titled: "Air Quality Impact of the Proposed SOHIO Tanker Fleet on Port Valdez, Alaska." We believe there is a need for continued analysis of the Valdez operations, of the type performed by ERT for BLM, however our review of this study reveals the following problems:

18 a) EPA questions whether the ambient levels for hydrocarbons, presented in the study as baseline data collected by Alyeska, would be as constant as stated.

19 b) The assumed emission factor of 1.2 lbs/1000 gal (taken from Mackenzie, 1976) is for the loading of crude oil with a true vapor pressure (TVP) of 4.5 psia. However, since this emission factor increases linearly with vapor pressure and the TVP of North Slope crude at loading temperature is approximately 11 psia, the ERT emission factor is low by at least a factor of 2. In addition, the emission factor used should include both the vapors initially in the vessel and those generated during loading. The use of an emission factor for only the initial vapors results in an additional underestimation by almost a factor of 2. As a result, the ERT study underestimates the hydrocarbon (HC) emissions by a factor of 4.

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20 c) The emission factors utilized for the stack gas emissions from the tankers are incorrect and underestimated significantly. The SO_2 emissions are underestimated by a factor of 2, NO_x emissions by a factor of 3, and HC emissions by a factor of 8.

21 d) EPA believes it is unlikely that an oxidant model developed and validated for Los Angeles could accurately predict the oxidant situation in an Alaskan environment. Therefore, oxidant modeling and predicted concentrations in the ERT study are suspect.

22 e) The use of the diffusion model PTMTP for estimating SO_2 impact of tanker stack gas emissions does not predict the worst case situation. EPA believes a terrain interactive model could be better employed in order to account for the elevation differences between the tankers at sea level and the hillsides in the vicinity of the Port. In the case of Valdez, we suspect that the maximum impact would occur on the hillside south of the terminal and would be significantly greater than that predicted by the PTMTP model. This terrain interaction problem should be studied further.

23 In the area of water quality, several EPA concerns remain outstanding. For example, discussions in the draft EIS (pp.1-43) concerning the hydrostatic testing program for the pipeline remain unclear. In Chapter One, three alternatives are listed, but the adverse and beneficial impacts of each are not explored. The discussion in this chapter assumes testing only the new sections in four segments, with a different source and discharge point for each. In Chapter Three, however, the admission is made that the availability of water from rivers and wells is not known at this time. The BLM proposal is that the water be taken from San Pedro Bay and discharged at Midland using evaporation ponds. EPA urges that the final EIS discuss the advantages and disadvantages of each of the three alternatives mentioned. In the interest of avoiding the use of 260 million gallons of water, preventing the necessity of multiple discharge points, and preventing the use of scarce freshwater sources in the southwest, we suggest the use of seawater and testing of the pipe by sections. This would allow reuse of the water and also facilitate the testing of the valves. A definite test program should be presented in the final EIS.

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24 Another principal water quality concern centers on the dredging activity proposed for the Long Beach harbor area. The draft EIS indicates that dredging in the tanker berthing area at Long Beach will be necessary to increase the water depth from 42 feet to 62 feet to allow the entry and docking of 165,000 DWT vessels. On page 1-29, however, the statement is made that the present harbor depth of 42 feet should allow the 165,000 DWT vessels safe bottom clearance. These conflicting statements regarding required dredging activity at Long Beach should be corrected or otherwise explained in the final EIS.

25 Also, the draft EIS indicates that 2.6 million cubic yards of bottom sediments would be dredged in the Long Beach terminal area. Of this 2.6 million cubic yards, 700,000 cubic yards will become part of the new breakwater and the remainder discharged at an offshore disposal site. This site should be identified as EPA Interim Dumping Site, Los Angeles #2. Public Notice No. 76-110, issued by the Los Angeles District Corps of Engineers for the dredged material to be discharged at Los Angeles #2, indicates that the dredged material may also be discharged at "an approved adjacent project site." The final EIS should identify this site, what its purpose will be, how its use may modify those impacts attributed to the SOHIO project, and all other impacts which will result from the use of this alternate site.

Also, the draft EIS indicates that California and Arizona water quality standards for turbidity in the Colorado River would be exceeded during and immediately following construction of a buried pipeline crossing. EPA suggests that the final EIS address the following items regarding the buried pipeline crossing:

26 (a) What alternatives to a buried crossing have been considered?

27 (b) Chapter 5 indicates that there would be disruption of aquatic life for a 2 year period during construction, repair and maintenance of the crossing. What is the significance of the 2 year time period? What types of repair and/or maintenance are foreseen?

28 (c) The design of the crossing and construction methods should be described in detail as these will markedly effect water quality impact.

29 (d) Water intakes on the Colorado River between

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29 the crossing site and Imperial Dam should be identified. Potential negative impact thereon of construction, repair and maintenance, and of possible oil spills, should be identified.

30 Turbidity problems are also expected at the West Coast terminal sites. The draft EIS identifies high turbidity levels in Long Beach Harbor as an adverse impact that cannot be avoided. These turbidity levels will probably exceed California standards for salt water bays almost continually from March 1977 to September 1978. The final EIS should contain a detailed description of how the breakwater is to be constructed. It should identify those aspects of the construction process which will contribute to the anticipated turbidity problems. The final EIS should also evaluate alternative construction techniques that might reduce the turbidity problem. Finally, the final EIS should discuss in detail the impacts associated with these expected high turbidity levels.

EPA offers the following additional general comments for consideration by BLM in the preparation of the final EIS.

31 1. The supply analysis emphasizes, among other points, the relatively high sulfur content (1%) of North Slope crude and the general look of California refinery capacity to handle high sulfur crude. The economics and incentives of refinery conversion to handle high sulfur crude are not discussed in the draft EIS. This appears to EPA to be a critical factor in the supply scenarios since the refining of Elk Hills crude and possibly off-shore crude may encounter similar capacity problems. It would appear that in the future a large portion of the total domestic incoming west coast crude will, in fact, have high sulfur content. The environmental effects of such an occurrence should be examined in the supply scenario analysis.

32 2. There is no air quality analysis in the draft EIS with respect to NO_x emissions and the .25ppm one-hour California standard or the yearly .05ppm National standard. Also, no analysis is shown with respect to the 24ppm National three-hour non-Methane Hydrocarbon air quality standard. The draft EIS erroneously states that there is no Federal NO_2 standard. (The Federal standard is 0.05 ppm as an annual average and is currently being violated in the South Coast Basin.)

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33 3. In Chapter 2, certain rare, threatened and endangered and/or protected plants and animals were identified to potentially occur within the pipeline corridor. What special provisions have been made for confirmation of their occurrence in the immediate area of the proposed pipeline? What contingency plans exist for the event that such species are recognized to occur within the path of the proposed pipeline route?

34 The same attention should be given the historic sites, such as the Indian village of Sahatapa, and especially archaeological resources not previously identified, but discovered during the pipeline trenching operation.

35 4. Discussion concerning future oil supply and demand should include the ramifications of the expected curtailment of the 16" Four Corners pipeline.

36 5. One of the main issues related to the proposed SOHIO project is that the project may, in some measure, affect the delivery of future natural gas supplies to California. In a recent response from the California Energy Resources Conservation and Development Commission to a questionnaire circulated by the Interior and Commerce Committees of the U.S. Senate, the Commission urged a re-ordering of the time frames which are currently being considered by Federal agencies in order that decisions on the SOHIO project would be delayed until a final decision is made on the transportation and disposition of Alaskan gas. Although, the draft EIS contains a discussion of the relationship of the proposed gas pipeline abandonment on gas supplies to California, EPA suggests that the final EIS contain a more extensive discussion of the relationship of the proposed project to the availability of natural gas to California. Should supplies of Alaskan natural gas be diverted away from California, more crude oil may need to be utilized in California as residential and industrial users are forced to adapt to the use of fuels other than natural gas.

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37 6. The final EIS should more fully describe the type of sanitary facilities which will be utilized during construction. Also, discussion of the specific measures which will be provided at equipment storage, repair, and service areas to prevent contaminants from reaching fresh water streams along the construction right-of-way should be included in the final statement.

38 7. The discussion on earthquakes and fault zones should include a history of pipeline failures that have occurred in regions to be traversed by the pipeline. This would help in evaluating the hazards that exist along the pipeline route. This is especially important in the California segment where the pipeline is to cross four major fault zones. Also, although the discussion in Chapter Two indicates that the pipeline will definitely be aligned so as to cross faults at right angles, this is only listed as a proposal in Chapter Four. This item should be clarified in the final EIS.

39 8 Several recreational projects are being planned in the immediate area of the proposed docking and storage facilities. These include an amusement park, a marina, and parks. Although the BLM proposes that the storage tanks be moved inland, the docking structure and surge tanks will remain. The final EIS should discuss the impacts of the proposed project on the recreational plans and any coordination that has occurred with the local planning authorities.

40 9. We suggest that the alternatives chapter in the final EIS include a summary comparing the advantages and disadvantages of each port and pipeline route for ease of comparison. The present summary, which indicates only if the impact is low, moderate, or high, is too subjective to be of real value.

41 10 The figures given for the quantity of dredge spoil material and for the quantity of rock needed for the breakwater are not consistent throughout the draft EIS.

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41 The following are the amounts given:

pp. 1-13 of the Summary	-	1.45 million tons of rock
pp. 1-16 "	-	2.47 million cubic yards of spoil
pp. 1-21 "	-	2.6 million cubic yards of spoil
pp. 1-27 "	-	2.5 million cubic yards of spoil
pp. 1-29 "	-	2.6 million tons of rock

Specific Comments

Executive Summary

page I-33, I-35 EPA does not issue a "permit to operate" under its Performance Standards for New Stationary Sources (40 CFR 60). A source is required only to perform certain notification activities to certify compliance with the regulations emission and equipment requirements.

page II-5 The California Air Resources Board adopted, October 8, 1976, New Source Review Rules for the Southern California APCD. This rule has been submitted to EPA, Region IX, for review as to SIP revision approval. The status of this approval/disapproval action should be included in the final EIS.

page III- Mitigative action for the expected violations (and or continued violations) of SO_2 and particulate standards will be the use of 0.5% Sulfur fuel (not 0.05%). Later the document indicates purging will occur in "emergency situations" without adequately describing the situation or the probability of occurrence.

Chapter 1

page 1-1

42 The EIS's description of SOHIO's eleven (11) tankers implies that these are the only vessels to be used to transport crude oil to the SOHIO Long Beach terminal. The final EIS should include descriptions of other Alaskan oil delivery scenarios (i.e. what other Jones Act ships are available) and other oil delivery scenarios (i.e. Arabian crude to SOHIO terminal, etc) The characterization of North Slope oil should include its sulfur content (averaging 1%) as well as that of other crude oil imported into PAD V such as the low sulfur crude from Canada and Indonesia. The same type of comparison should be made for viscosity.

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43 Reference should be made to the development and marketing arrangements between SOHIO and British Petroleum.

page 1-2

44 Previous EPA discussions with the SOHIO Company identified the Signal Hill facility as the preferred inland tankage location. The draft EIS, however, pointed almost exclusively towards Dominguez Hills Terminal. Reasons for no longer considering the Signal Hill facility should be presented in the final EIS

page 1-4

45 "1982" should be omitted.

page 1-11

46 It is not clear whether maintenance roads would be required along the entire pipeline or only to pumping stations. Maintenance roads may not be necessary in areas where the pipeline is buried.

page 1-14

47 Reference is made to the pipeline crossing over Alameda Boulevard. All other references to road crossings involve pipeline burial. Such an exposed crossing may present a hazard to safety as well as an environmental hazard and warrants a special discussion of the need for an above ground crossing at this location and a description of safeguards. This type of crossing should be characterized under the discussion of the construction of highway and railroad crossings beginning on page 1-54.

page 1-16

48 Under the description of the Port of Long Beach facilities which includes "suitable utility and support facilities... to service the tankers while moved in berth...," mention should be made that no provision is planned for reception of sewage from the tankers.

page 1-20

49 The figure on this page should depict two storage tanks of 615,000 barrel capacity each and 270' D x 66' not 653,000 barrel capacity and 270' D x 64'

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page 1-29

50 The last paragraph alludes to the present depth in the area of the proposed Pier J berths (42 feet mean lower low-water) to be safe for bottom clearance by 165,000 DWT vessels. It this is true, no dredging would be required. The last sentence should suggest that the proposed depth is 62 feet (MLLW).

page 1-32

51 EPA suggests that any storage tanks to be located on Pier J and at the proposed Dominquez Hills terminal be protected from overflow with an automatic alarm connected to the tank gauging device.

52 With regard to hydrostatic testing of the storage tanks at the proposed Dominquez Hills terminal (over 51 million gallons of water), what source of water will be utilized for such testing?

53 The final EIS should provide the selected design for casks and seals in the description of storage tanks on p.1-32. This information will be of value for both air quality analyses and for determining possible future permit conditions

page 1-67

54 The computer monitoring system which indicates by alarm a difference in flow or possible leak of .05 percent or more or 24 bbl/hr (about 1,000 gallons/hr) may not be adequate. Inland oil spills of 1,000 - 3,000 gallons occuring within 1-3 hours could be highly damaging to the environment under certain conditions.

page 1-21

55 The discussion here states that 1.5 million tons of rock from the Catalina Island quarry site would be excavated and transported to create the impervious breakwater in Long Beach Harbor. Possible environmental impacts which could affect the quarry site include increased sediment, noise, solid waste, air and water pollution. Because of

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55 the large volume of material to be quarried, the area from which this material is obtained could experience such adverse impacts. EPA recommends that pollution prevention plans be formulated for this activity and presented in the final EIS.

page 1-105

56 EPA suggests that the discussion on "communication systems" also include communications with incoming vessels with regard to location, expected time of arrival, queing time, special requirements for pier facilities, and related matters.

page 1-114

57 Discussion should be directed to proposed approaches for the restoration of desert areas.

page 1-138

58 A permit to utilize an EPA approved disposal site for dredged material should be added to the list of project approval requirements.

page 1-143

59 The listing of Federal regulations and codes for the Port of Long Beach, Dominquez Hills terminal, and the Midland terminal should include the Oil Insurance Association Construction and Layout Recommendations and Fire Protection Recommendations for oil storage tanks (Bulletin 400-2).

Chapter 2

page 2-3

60 Reference is made to prevailing wind directions which occur either from Northeast or Southwest in the area of Port Valdez. The draft EIS mentions that winds in this area are highly variable and usually no stronger than 30 miles per hour. Figure 2.1.1.1-1 indicates an abrupt drop in elevation from 2500 feet to sea level on the westerly side of the Valdez Narrows which connect Port Valdez with Prince William Sound. Relatively steep slopes occur on the eastern side with elevations near the Narrows as high as 1,500 feet. Recent press reports indicate

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60 that winds are channeled through this narrow, northeasterly to southwesterly oriented passage causing high wind velocities, as much as 200 miles per hour. Such conditions, if existent and occurring frequently on an annual basis, could present a hazard to tanker traffic in this relatively narrow passage. EPA suggests that discussion be given to the presence or absence of such conditions and, if present, their relationship to the probability of tanker accidents and oil spills in the area of Valdez Narrows and to the queing of ships entering or departing Port Valdez.

61 Reference should be made to Port Valdez being an ice free port.

page 2-62

62 Significant differential displacements are mentioned to be possible at locations where the proposed pipeline crosses the San Jacinto and San Andreas fault zones and that this situation must be considered in the pipaline design. No mention is made in the description of the proposed project for spacial provision in pipaline construction in fault areas. On page 2-67 it is not clear what "precautions will be taken to prevent rupture" during a Contingency Level Earthquake. The final EIS should present an appropriate discussion of construction alternatives in sensitive fault areas.

page 2-150

63 EPA suggests that the physical description of the Port Valdez area, particularly the passage known as Valdez Narrows which connects Prince William Sound with Port Valdez, be covered in greater detail. A small island, termed "Middle Rock," located on the west side of the passage, restricts movement of tankers to a 900 yard wide channel to the east of the rock. Shoal rock at a 30 foot depth and measuring 300 yards wide and 400 yards long forms a base for the island. These rocks as well as other shoal areas in the Narrows will be a significant factor in determining the mode of tanker traffic into and out from the Port of Valdez.

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page 2-259

64 The final EIS should contain a brief discussion of air quality near and in the vicinity of the Santa Barbara Channel due to (a) offshore platforms, (b) concentrated North-South vessel traffic, and (c) potential OCS leases from Santa Barbara to San Diego.

page 2-260

65 EPA suggests that the final EIS include a discussion of air quality related to the Federal oxidant standard of 8 ppm (1 hour). Table 2.1.6.2-1 should also include information related to the Federal standard. Figure 2.1.6.2-1 should also be contrasted with the EPA and California projections for future attainment of this standard.

66 Section 2.1.6.2. chooses less than optimum charts and statistics to represent existing air quality. A summary of trends in total emissions of all pollutants (Figure 2.1.6.2-1) is not particularly useful and can actually be misleading. Trends in emissions of individual pollutants for which there are ambient standards would be far more useful. Trends in oxidant concentrations should be related to the Federal standard which is more stringent and therefore binding under the Clean Air Act, rather than the State standard (Table 2.1.6.2-1). The data presented in Figures 2.1.6.2-3 and 2.1.6.2-4 are too old to be representative of the current situation.

section 2.1.11.

67 This section estimates ambient noise levels for the Port of Long Beach by utilizing the Environmental Research and Technology noise propagation model developed for the Bureau of Land Management. It has not been published to this date. Will this model be published or made available to other Federal agencies? This information should be included in the final EIS.

page 2-269

68 The Federal NO_x standard is expressed in terms of NO_2 and is 0.05 ppm on an annual basis. We recommend that the final EIS include a parallel discussion of other Federal and State standards and attainment possibilities for each, emphasizing the most stringent standard for each pollutant.

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page 2-286

69 Local HC ambient concentrations are not the background against which hydrocarbon emissions from the project will be assessed. The hydrocarbon precursor effect on oxidant formation is a regional problem and a better way to judge the impact of this project would be to examine its impact on attainment and maintenance of the oxidant standard.

page 2-779

70 In paragraph 3, line 6, a word needs to be changed in this sentence. The word "lower" should be changed to "higher." This correction should be included in the final statement.

page 2-788

71 The identification of sensitive noise receptors along the pipaline route from Banning, California to Midland, Texas was not included in the draft EIS. These sensitive noise receptors should be identified and included in the final EIS. Maps 2.1.13-3 through 2.1.13-12 (Planned Land Use, 1985-1990), suggest that the residents near pumping stations in the to-be-developed areas along the pipaline route may be impacted by noise from pumping units. Discussion on these topics should be addressed in the final EIS.

72 Also, how many of the 5,000 horse power (hp) pumping units will be used at the 20 main-line pump stations? These 5,000 hp units exhibit the upper limit of pumping unit noise. This information should be included in the final statement.

page 2-872

73 Discussion of marine transportation networks is covered by the sentence "Established tanker lanes offer the most direct route for the proposed Sea Leg and will be used." This section should be expanded to include characterization of the vessel traffic separation scheme established for the Gulf of Santa Catalina by the U.S. Coast Guard. Exploratory oil drilling will occur within the traffic lanes. Such activity may affect the safety provided by the traffic separation

17

73 scheme and may have a direct bearing on ship traffic movements to and from the Port of Long Beach.

page 2-1029

74 Section 2.2.1 is missing.

page 2-1031

75 The analysis of projected future air quality in the Los Angeles Air Shed <u>without</u> the project should address the subject of the likelihood of numerous relatively small, non-inerted oil tankers transporting Alaskan Crude to Long Beach under the scenario that larger, more modern, inerted, segregated ballast ships would be utilized for long distance transport such as to the Panama Canal or Japan. Such ships could conceivably emit more air pollutants than the proposed SOHIO ships importing Alaskan Crude into the proposed terminal facility. This point is covered to some extant on page 132 of Chapter 3.

page 2-1038

76 Table 2.2.6.1-4 indicates that HC emissions between the years 1980 and 2000 will remain relatively the same. Further, Table 2.2.6.1-3 indicates NO_x emission reductions by the year 2000. How does this relate to the projected oxidant ambient air quality increases in the year 2000 given in Table 3.1.6.1.2-7.

page 2-1124

77 References to Sections 2.2.1. through 2.2.5 are missing. Many others are missing for sections 2.2.6. and 2.2.7.

<u>Chapter 3</u>

page 3-1

78 EPA is unable to make an evaluation of the draft EIS statement that, after tradeoffs, the project will be "insignificant" (in terms of air quality impact) without additional detail on the proposed tradeoff measures. The final EIS should include such detail.

page 3-56

79 The draft EIS mentions here that Puget Sound, with deep water, could

79 accommodate larger tankers (180,000DWT) than San Francisco and that with such large vessels and consequentially fewer departures, the number of accidents would drop accordingly. Current legislation in the State of Washington and subsequent litigation involve prohibition of tankers greater than 125,000DWT entering Puget Sound. If the State law is upheld, the accident rates could be higher than those listed in Table 3.1.5.2-3.

page 3-92

80 Page 3-92 of the draft EIS states that water quality standards of both Arizona and California would be exceeded during the period of instream construction. Crossing water bodies such as the Colorado River is expected to produce significant water quality impacts such as an increase in turbidity, a reduction of dissolved oxygen and an increase of the biological oxygen demand. The EPA recommends that coordination with local Soil Conservation Districts be initiated to assist in planning preventive erosion and sedimentation mitigative measures to insure least impacts to water quality.

page 3-109

81 Until this page, there has been no previous discussion of storage tanks at either Indio or Redington. EPA recommends discussion of these tanks in the pump station description of the final EIS along with the inclusion of an emissions analysis in greater detail.

page 3-114

82 We believe that comparison of HC and NOx emissions to total basin emissions is misleading and should be omitted.

page 3-115

83 As emissions from short term construction activities are predicted to violate SO2, particulate and CO standards, the final EIS should better explain why CO emissions from this activity will have "no impact."

page 3-120

84 EPA views all non-methane hydrocarbons as reactive and the final EIS should acknowledge this item. Also, as the

84 area is not now attaining the oxidant standard, all non-methane hydrocarbon emissions will contribute to an existing violation unless specific offsets are obtained.

page 3-120, 123

85 The final EIS should include additional detail regarding tanker operations, specifically ballasting and purging.

page 3-124

86 The final EIS should further emphasize the concept of "frequency of occurrence," particularly in the area of estimating probable annual hydrocarbon emissions.

page 3-127, table 3.1.6.1.2-7

87 The cause for the project related changes in oxidant levels in the year 2000 is not immediately evident since the same project emission scenario is used in the 1980 and 2000 cases with only the background level changed. Some discussion should be given in the final EIS as to why the background increases in emissions produce a proportionate project related increase in O_3 concentration (e.g. EPA would expect the project impact to remain approximately the same in absolute values and decrease greatly in proportionate values)

page 3-128

88 The "probability of occurrence" discussion on tanker scenarios is not descriptive when it uses the phrase "lower if not zero." This is an important point and numbers should be provided in the final EIS as there can be a great deal of difference between "lower" and "zero". Further, it is not clear to EPA why table 3.1.6.2-3 shows the potential occurences to increase rathern than decrease in the "expansion" scenarios.

page 3-130

89 The analysis of the SO_X impact is additive. EPA suggests that the total impact be discussed (e.g. ambient air quality plus the project contribution).

page 3-132

90 The discussion of emission reductions due to substitution of the Alaskan tankers burning .5%S fuel with segregated ballast for the older foreign vessels

90 burning 3%S fuel with non-segregated ballast should be expanded in the final EIS. This type of analysis may be used in emission tradeoff studies.

91 The referenced section (3.1.16.5.2) does not exist although Table 3.1.16.5-1 does indicate a 200,000 bbl/day replacement of high sulfur foreign crude with Alaskan crude (source for the 465,000 bbl/day is not readily apparent). EPA suggests that the emissions analysis be explicitly included in the Appendix and that an analysis of the emissions for a 200,000 to 465,000 bbl/day replacement of foreign crude without the Pier J project be included since this is a likely alternative. A similar SOHIO Transportation Company analysis (Impact of the SOHIO Project on Air Emissions in the Long Beach Port Area, August 20, 1976) indicates a lower level of emissions and sensitivity to Elk Hills oil disposition.

page 3-137

92 Proposed mitigating measures such as substituting generators for power lines at several pumping stations will result in localized emissions. The final EIS should analyze the impacts of such emissions.

page 3-392

93 The pipeline capacity in Table 3.1.16.5-4 is 2.81 billion cft/day without the 30 inch pipeline. In the text on page 3-393, 2.0 billion cft/day is used as well as in Table 3.1.16.5-5 and 3.1.16.5-6. The final EIS should address these differences.

page 3-395

94 Table 3.1.16.5-5 indicates a 97% load factor in 1983, not in 1981 as discussed in the text on page 3-394. The 1981 date is for the "high volume" case only, and should be so indicated in the final statement.

Chapter 4

page 4-1

The section on mitigating measures contains over 60 pages of mitigating or offsetting measures either required or proposed by

various agencies and commitments on the part of SOHIO. Many of these may evolve into permit conditions to be adhered to by SOHIO during the construction and operations phases of the project. Other proposed measures may be imposed on other entities such as the Port of Long Beach and foreign flag vessels. Should the project be authorized to proceed by all relevant Federal State, and local agencies, many complex and diversified guidelines, monitoring requirements, and inspection schedules will be imposed upon the project to assure environmental compatibility. EPA suggests that a Federal task force be considered by BLM for the overall coordination of the implementation of environmental requirements imposed on the project.

Chapter 5

page 5-11

95 On this page of the draft EIS, there is a statement that all mitigative measures to insure good air quality within the Los Angeles Air Shed are technologically feasible and legally enforceable with one exception. The exception arises because of the question of enforceability of a rule prohibiting ballasting into petroleum cargo tanks at the Pier J facility. However, if this rule is not strictly applied, there could be air pollution incidents downwind from Pier J when high hydrocarbon emissions, result from such ballasting. EPA suggests that a thorough discussion of the ballasting problem be included in the final EIS.

page 5-13

96 EPA recommends using a "worst case assumption" of 100% oxidation of NO_M to NO_2 immediately. The impacts of this oxidation should be provided in the final statement.

page 5-14

97 No explanation of air quality impacts of the proposed pumping stations have been included in the draft EIS. EPA recommends that the final EIS include an analysis of emissions of hydrocarbons from pumps, valves and proposed storage tanks (as well as spills), and emissions

22

97 of all five criteria pollutants from operation of the standby generators.

Chapter 8

98 Chapter 8 provides a summary including air quality impact per alternative. However use of the terms slight, moderate, and high is not sufficient in a project of this magnitude. The relative impacts need to consider whether the NAAQS will be exceeded in a specific area. Further, scenarios

99 in the final EIS should allow each alternative to assume the same mitigating measures as those assumed for the Port of Long Beach. This would improve the current comparison which is misleading in that it shows the Long Beach alternative having much less impact on air quality than the other alternatives.

100 Also, there is a tendancy, when discussing alternate entry ports in California, to understate air quality problems. Significant oxidant violations, for example, occur "downwind" of Estero Bay, San Luis Obispo Bay, Oxnard and Camp Pendleton. The final EIS should note and consider such violations in the analysis of alternatives.

Appendix

101 As stated in Appendix A2.1.4.1, several parameters of sediment quality within the Long Beach Harbor exceed the proposed criteria for determining the acceptability of sediments for disposal proposed by the Environmental Protection Agency Region IX. These parameters include cadmium, zinc, mercury, and oil and grease. Resuspension of these pollutants could have adverse affects on the water quality and aquatic life within the harbor area. The final statement would be strengthened by further discussion of possible impacts to fish and crustaceans as a result of resuspension of these pollutants.

page A-50

102 Discussion in the final EIS of the reliability of inerting systems would help clarify the probability of purging an empty tank. If an inerting system fails, what alternatives may be employed?

page A-54

103 How is purging related to tank cleaning? It seems that the two paragraphs involving the ballast passage to port are describing independent operations. What is the sequence of operations (e.g. purge, wash, purge)?

23

104 What is the relative frequency of purging between inerted and non-inerted tankers?

105 page A-55 Title should read: "Gas Freeing..."
figure A.1.1.1.1-3

page A-266
267

106 EPA believes it would be helpful to describe the meteorological conditions of the calibration day, 29 September 1969. The ballasting operation could result in the HC emissions remaining near the surface at the facility, especially when exposed to low wind speeds. The mixing assumed by the reactive model may therefore not actually occur.

page A-272

107 If the downwind and crosswind dispersion coefficients in the equation came from Turner then a correction factor is required to reflect one-hour averaging. The current results would tend to overestimate concentrations.

page A-277
280

108 EPA recommends that the final EIS narrative describe efforts now under way to better define storage tank emissions and to demonstrate that they are lower than API 2517 would estimate.

page A-287

109 Formulas should read:

$$(n\ P/24)^m \quad \text{and} \quad (2.2/24 \times .196)$$

The above formulas give the approximate probability of a simultaneous event (e.g., ballasting in port) at any instant in time during the year. The probability, for example, of three 70K tankers simultaneously ballasting for at least an hour during the year would be less.

RESPONSE

Comment #1

The text of Section 2.1.6.5 has been rewritten to reflect this comment.

Comment #2

A table has been added to Appendix A3.1.6.1 which lists all estimated emissions from the project in order to assess the magnitude of the trade-off requirements. A current Los Angeles regional inventory of emissions is given in Section 2.2.6.1. The current status of applicant proposed trade-offs has been added in Section 4.1.5 of the FES. The treatment of Midland air quality has been expanded in Section 3.1.6.3. The applicant has not yet proposed hydrocarbon trade-offs for the Midland area.

Comment #3

An expansion mode would involve new permits, a new ES, and new impacts. This is stated in various places in this ES. A modification of the project would also require new source review under appropriate rules and guidelines. To forestall any implication that IMPACTS of expansion have been addressed in this ES, references to IMPACTS from an expansion mode have been removed from the FES.

Comment #4

The text of Section 2.1.6.5 has been rewritten and addresses the comment.

Comment #5

The applicant has not submitted a comprehensive description of the Dominguez Hills terminal except as illustrated in Figure 1.1.1.2-4 in Chapter 1, Section 1.1.1.2, Facilities.

Comment #6

The hydrostatic test plan is presented in Section 1.2.3.2, under Testing, and in Appendix A1.2.3.2.

Comment #7

Oil spill contingency plans have been completed and are referenced in the FES. Impacts in Chapter 5 take into consideration the general provisions of the contingency plans.

Comment #8

This statement was corrected in Section 1.2.2.1, under Dredge and Fill.

Comment #9

Although an archaeological field survey was not completed in time for inclusion in the FES, a detailed description of the procedures to be followed and the mitigating measures involved is presented in Section 4.2.8. Tanker route information and analysis developed by Tetra Tech, Inc., for the Corps of Engineers has been incorporated into appropriate sections throughout the FES.

Comment #10

Refer to the responses to Comments 1 and 2.

Comment #11

The discussion of mitigating measures in Chapter 4 of the FES has been substantially revised and expanded. See Section 4.1.5 for a discussion of proposed trade-offs. Uncommitted trade-offs are treated as only potential ones and are not taken into account in the discussion on unavoidable impacts (Chapter 5). If these impacts are unacceptable, then acceptable trade-offs would be the subject of later negotiations between the applicant and regulatory agencies during the permitting process. Please refer to response to Comment 2 above.

Comment #12

See the revised text in Sections 3.1.6.1.1, 3.1.6.2.1, and 3.1.6.3.1 in the FES. See also response to Comment 11 above. Offsets during construction are not discussed in the EPA guidelines and new source rules; no reference, therefore, is made to this concept in the FES.

Comment #13

Refer to the response to Comment 3 above. The SOHIO design allows easy expansion, and this is discussed in Chapter 1 (Project Description).

Comment #14

Refer to the response to Comments 3 and 13 above.

Comment #15

The section on potential air quality impacts near Midland has been expanded in the FES. See Section 3.1.6.3.

Comment #16

The discussion on Midland air quality has been expanded in Section 3.1.6.3. The latest available data were used in the inventory analysis. See response to Comment 12 above.

Comment #17

As discussed in Sections 2.1.16.5 and 3.1.16.5 on Energy Supply/Demand, the introduction of Alaskan crude oil would have little or no impact on the refining and petrochemical industries in the Permian Basin area. Existing refineries in the area have an approximate capacity of 299,000 bbl/cd, and sufficient crude oil of the type for which the facilities are designed is locally available in adequate amounts at this time. The possible future use of Alaskan crude in the area was reinvestigated and determined to be unlikely because of existing local supplies, the need for physical adjustments in present refineries to handle the Alaskan crude, and marketing conditions. However, the decision to use Alaskan crude in existing refineries or in new refineries or petrochemical industries at some future date would have to be evaluated in terms of economic and environmental conditions at that time.

Comment #18

The air quality study of Valdez used the best available data. No changes were made in the text.

Comment #19

This study used the best available methodology. After reanalysis of the data, no text change was believed to be warranted.

Comment #20

The emissions figures were calculated using the best available data. The methodology is described in the ERT report, "Final Report, BLM-SOHIO Project, Volume 5: Air Quality, 1976," which is referenced in the FES.

Comment #21

This study used the best available methodology. Model calibration procedures were employed using air quality and meteorology data for Valdez. Section 3.1.6 acknowledges the lack of validation experience for Valdez and for reactive modeling of intensive peak concentrations.

Comment #22

For the Port of Long Beach the plume rise for tankers and the proximity of terrain to the Port facilities have been determined to preclude the possibility of terrain interaction. No text changes were believed necessary. Further analysis of Valdez air quality, including terrain interaction, has been added in Section 3.1.6, under Port Valdez.

Comment #23

The description of the hydrostatic test plan has been revised and updated in Chapter 1 in Section 1.2.3.2, under Testing. A more detailed procedure is included in Appendix A1.2.3.2. Corresponding impacts in Chapter 3 have also been revised based on this additional information.

Comments #24 and #25

These items were corrected in Section 1.2.2.1, under Dredge and Fill. Alternative disposal sites, potential impacts, and mitigation are not presently known and would be subject to further analysis by the U.S. Army Corps of Engineers during the permitting process.

Comment #26

The applicant considered both an overhead crossing, which would utilize the existing crossings, and constructing a new one. Neither was acceptable because of the aesthetic impact and the cost.

Comment #27

The two-year period is an approximation of the length of time necessary for on-site and downstream stabilization of aquatic life. Repair and/or maintenance will be necessary in the unlikely event of a pipeline break at the river crossing.

Comment #28

Many details are known about the proposed designs for river crossings, but certain specific details remain to be worked out. If the proposed project is implemented, final Federal approval of Colorado River crossing design will be under the jurisdiction of the U.S. Army Corps of Engineers.

Comment #29

Water intakes on the Colorado River are not identified in the ES. The discussions in Sections 3.1.8.2.1, Construction (Aquatic) and 3.1.8.2.2, Operation (Aquatic), on oil spill impacts would also apply to the water intakes mentioned.

Comment #30

It was believed that a more detailed description of construction techniques would not cause an improvement in the turbidity impact analysis. Section 3.1.8.1 has been modified to describe dredging processes which contribute to turbidity and to further define impacts associated with turbidity.

Comment #31

The California refinery capacity is sufficient to handle the 200,000 bbl/d of Alaska crude as proposed in this project.

Comment #32

A NOx analysis for construction activities is included in Section 3.1.6.1.1. A NOx analysis for project operations has been added to Section 3.1.6.1.2. The impact on the hydrocarbon standard has also been added to Section 3.1.6.1.2. The reference to the Federal NO_2 standard has been corrected.

Comment #33

Section 4.2.9 has been revised to reflect this comment.

Comment #34

Section 4.2.8 describes the special procedures which will apply to cultural resources discovered during pipeline construction.

Comment #35

Discussion of this subject is beyond the scope of the ES.

Comment #36

The present discussion of scenarios involving Alaskan gas in Section 3.1.16.5 of the FES is believed to adequately cover impacts on California natural gas supplies based on current information.

Comment #37

Requirements for the type of sanitary facilities and measures to avoid contaminating any waters along the proposed route by equipment and service areas will be included in the stipulations issued prior to construction.

Comment #38

No pipelines have had a history of fault-caused rupture along the proposed route, according to the Southern California Gas and El Paso Natural Gas companies. Section 4.1.2 states that the applicant is committed to cross the San Andreas fault at an angle of between 70 and 90 degrees unless an acceptable alternative is provided.

Comment #39

Adverse impacts of the proposed project on recreational plans for a marina and amusement park in the immediate area of Pier J are primarily visual impacts which are discussed in Section 3.1.10.1, Port of Long Beach. Coordination with local planning authorities is discussed in Sections 9.6.1 and 9.7 of the FES. No additional discussion of these impacts was believed to be necessary.

Comment #40

A general factual comparison of each port and pipeline alternative have been added in comparative tables in Section 8.0.2 of the FES.

Comment #41

This item was corrected in Section 1.2.3.1, under Dredge and Fill.

Comment #42

This item was corrected with latest updated information in Section 1.1.1.1, under Sea Leg.

Comment #43

The marketing arrangements between SOHIO and British Petroleum are considered beyond the scope of this ES

Comment #44

The applicant has proposed Dominquez Hills as the inland terminal; see Section 1.1.1.1, under Details of California Route.

Comment #45

This item has been corrected in Section 1.1, Background in Brief.

Comment #46

As discussed in Section 1.2.3.3 and 1.2.3.4, access trails would be maintained in the right-of-way along most of the pipeline. The impacts of such a trail have been treated for all relevant resources in Chapter 3. Maintenance roads outside the proposed right-of-way would require additional permits and environmental analyses where public lands are involved.

Comment #47

This item was corrected in Section 1.1.1.1, under Details of the California Route, to state that the pipeline would cross under Alameda Boulevard.

Comment #48

This item is now discussed in Section 1.2.2.1, under Tanker Berths.

Comment #49

Figure 1.1.1.2-4 has been revised.

Comment #50

This item has been corrected in Section 1.2.2.1, under Dredge and Fill.

Comment #51

This statement has been changed to reflect this comment in Section 1.2.2.1, under Storage Tanks.

Comment #52

This source of water for tank testing has been added to Section 1.2.2.1, under Storage Tanks.

Comment #53

This information is still in the process of development by the applicant and is not yet available for the text.

Comment #54

The mitigating measure in Section 4.1.3 has been changed to require the best available leak detection system.

Comment #55

Impacts of quarrying on Santa Catalina Island have been discussed in the appropriate sections of Chapter 3.

Comment #56

Items such as this were not discussed in detail, as they did not directly relate to impacts. Oil spills caused by tanker accidents are discussed in appropriate sections.

Comment #57

The discussion in Section 1.2.3.2, under Cleanup and Restoration, and related discussions in following chapters are believed to adequately cover desert restoration.

Comment #58

This item has been added to Table 1.3.1-1.

Comment #59

This item was included in Table 1.3.1.5-1 in Section 1.3.1.5, under Other Federal Regulations and Codes.

Comment #60

The discussion of wind at Valdez has been rewritten in Section 2.1.1 of the FES. The maximum wind speed (200 mph) reported is not documented and therefore not cited in the FES. An expanded discussion of tanker hazards in Prince William Sound is included in the Tanker Traffic Study, Appendix A1.1.1.1-A.

Comment #61

The fact was incorporated in Section 2.1.1.1 of the FES.

Comment #62

Specific design plans for construction in fault zones have not been completed for inclusion in the FES. However, the pipeline will cross the San Andreas and San Jacinto fault zones at an angle approaching 90 degrees, with the pipe buried within a cohesionless backfill. This will allow the pipe to rise up and slide along the ground surface in the event of significant ground displacement.

Comment #63

This information is part of the updated Tanker Traffic Study in Appendix A1.1.1.1-A of the FES.

Comment #64

A brief discussion of air quality offshore, including the Santa Barbara area, is given in the context of air quality impacts in Section 3.1.6.1.2. Tabulated data have also been added to Chapter 8 on alternatives to the project. Activity from other projects has no significant bearing on determining the incremental impacts from this proposed project.

Comment #65

Table 2.1.6.2.-1 and Figure 2.1.6.2-1 have been replaced in the FES.

Comment #66

Section 2.1.6.2 and Figure 2.1.6.2-3 have been revised to reflect this comment.

Comment #67

ERT did not contribute to preparation of this section. Sources of previously published information are discussed in the first paragraph of Section 2.1.11.1. Sources for Figures 2.1.11.1-1 and 3.1.11.1.1-1 have been cited in the FES. Credit is given in Section 3.1.11.1.1 to the California State EIR as source for the estimated levels due to pile driving. The propagation model was a simple geometric dispersion model and is discussed in the State of California EIR.

Comment #68

The text was corrected in reference to the Federal annual NOx standard. The discussion of nitrogen oxides has been revised for the FES.

Comment #69

Local hydrocarbon ambient concentrations are the background against which hydrocarbon emissions from the project will be assessed because they are a fundamental input to the photochemical model prediction of oxidant impact (see Section 3.1.6). The text was revised to include the 0600 to 0900 hours measurement time and the relationship to oxidant formation.

Comment #70

Section 2.1.11 has been substantially revised.

Comment #71

Table 2.1.11.2-1 was extensively revised for the FES.

Comment #72

Table 1.2.3.2-24 lists the horsepower requirements for all the pump stations. Information pertaining to the noise output of 5,000 hp pumping units is found in Appendix A3.1.11.1.2 of the FES.

Comment #73

A discussion of vessel traffic in the Santa Barbara Channel has been expanded in Section 2.1.14 of the FES. See also Appendix A1.1.1.1-A, Tanker Traffic Study.

Comment #74

Section 2.2.1 on Future Climate was added to the FES.

Comment #75

This emission problem has been added to Appendix A3.1.6.1.

Comment #76

It has been shown by B. Dimitriades and others in smog chamber experiments that as the hydrocarbon to nitrogen oxides ratio increases, the oxidant level is found also to increase. Since the large increase in oxidant levels for Year 2000 without the project are controversial, the results of the modeling have been removed from the FES.

Comment #77

There were no references cited in Sections. 2.2.1 through 2.2.5. The numbering error for 2.2.6 and 2.2.7 references was corrected.

Comment #78

Section 3.0 which summarizes impacts has been substantially revised. Also see the response to Comment 11.

Comment #79

The text in Section 3.1.5.1.2 recognized the possibility of differing accident rates for Puget Sound depending on tanker size. However, these statistics do not affect the projected accident rates and spill sizes described for the proposal in this section.

Comment #80

This recommendation has been included as a proposed mitigating measure in Section 4.3.2.

Comment #81

These are service tanks and are discussed in Section 1.2.3.2, under Service Tanks. Their very infrequent use (possibly once a year) would result only when there was a surge in the system. A surge would be unlikely in a system of this size. Emissions would be short-lived and minor. A complete description of the tanks is unavailable at this time.

Comment #82

Comment was noted, but no text change was made.

Comment #83

Please refer to the revised text in Section 3.1.6.1.1 in the FES.

Comment #84

The EPA definition has been referenced in the footnote to Table 3.1.6.1.2-4 and to Appendix Table A3.1.6.1-7.

Comment #85

Appendix A1.1.1.1 has been expanded to describe tanker operations in more detail.

Comment #86

The text has been revised to reflect this comment. Estimates of probable annual hydrocarbon emissions have been added to Appendix A3.1.6.1.

Comment #87

Based upon smog chamber experiments conducted by Dimitriades and others, it has been shown that the impact of given hydrocarbon emissions upon oxidant levels depends upon the background levels of NOx. As long as the HC to NOx ratio remains constant, the application of a linear rollback model to oxidant formation is valid. However, it has been shown that as the HC to NOx ratio increases the rate of oxidant formation increases. Also, refer to Comment 76 above.

Comment #88

Section 3.1.6.1.2, under Year 2000, has been revised in the FES because the quantification was based on assumptions that cannot be verified at this time. See also response to Comment 3 above.

Comment #89

For short-term impacts, the maximum concentrations occurred onshore as a result of onshore wind flow. For the purposes of short-term calculations, the onshore flow was assumed to have a nondetectable background level of SOx.

For long-term calculations, the project emissions were significantly small relative to the South Coast Air Basin emission inventory so that the project impacts were calculated separately, without the additive effect of the background concentrations.

Comment #90

BLM held extensive discussions with the applicant on the problem of quantifying the anticipated back out. Many variables are involved and BLM was not satisfied that one back-out figure and associated factors were defined. More study is necessary to obtain reliable quantification of benefits from back out. The discussion of effects of oil replacement in Section 3.1.6.1.2 has been revised.

Comment #91

The reference to Section 3.1.16.5.2 on energy supply and demand was corrected. See response to Comment 90 above.

Comment #92

The proposed on-site power generation mitigating measure has been deleted in the FES.

Comment #93

The text in Section 3.1.16.5., under Natural Gas, has been changed to reflect this comment.

Comment #94

Section 3.1.16.5 has been changed to reflect this comment.

Comment #95

The South Coast Air Quality Management District considers the measure enforceable. Therefore, Section 5.6.2 of the FES has been revised to delete this statement.

Comment #96

We do not interpret "NOx as NO_2" to justify the nonphysical assumption of treating all NOx emissions as being immediately converted to NO_2. Estimated worst-case concentrations of NOx are given in the FES.

Comment #97

Expected emissions are presented in Appendix A3.1.6.1 of the FES.

Comments #98, 99 and 100

The discussion of air quality impacts for the various alternative ports has been substantially revised and expanded in Chapter 8 of the FES. Relevant available data, mitigating measures, and National Ambient Air Quality standards were utilized and considered in these analyses.

Comment #101

A sediment sample taken from Station 41 (see Figure 2.1.4.1-6) located near the perimeter of the proposed dredging exceeded the EPA pollution parameters for oil and grease. The samples taken from the sampling stations located within the heart of the proposed dredging area were found not to exceed the EPA pollutant parameters. If oil and grease are released as a result of the dredging operation, the possible general effects to marine organisms would be similar to those discussed under the operational oil spill impacts in the port as presented in Section 3.1.8.1.2, under Port of Long Beach.

Comment #102

There are no public data available on reliability of inert gas systems. If proposed mitigating measures are actualized, data would subsequently be available. If an inerting system fails there are no known alternatives.

Comment #103

A discussion of operating procedures has been added to Appendix A1.1.1.1.

Comment #104

See the response to Comment 103 above.

Comment #105

Figure A1.1.1.1-3 has been corrected to reflect this comment.

Comment #106

The meteoroloical conditions for the model calibration day are described in the ERT report prepared for BLM, "Final Report, BLM-SOHIO Project: Volume 5, Air Quality, 1976." See Chapter 1, Table of Contents, for availability of this study.

Comment #107

Appendix A3.1.6 has been extensively revised. The correction factors required to calculate one- and three-hour averages are included in the model computations. The introductory narrative has been corrected in conformance with the Turner workbook for Gaussian diffusion modeling.

The section on potential air quality impacts near Midland has been expanded in Section 3.1.6.3 of the FES.

Comment #108

The text has been revised and expanded in Section 3.1.6.1.2, under Oxidant Impacts, to reflect this comment.

Comment #109

As stated in the comment, additional conditions lower the probability. Because probability analyses tend to underestimate by assuming perfect randomness, the refinement suggested in the comment was not incorporated in order to achieve a compensation of effects. See the revised text in Appendix A3.1.6.1.

FEDERAL POWER COMMISSION
WASHINGTON, D.C. 20426

Charles R. Tulloss, Project Manager
SOHIO EIS Project Office
P. O. Box 660
Los Alamitos, CA 90720

JAN 24 1977

Dear Mr. Tulloss:

The staff of the Federal Power Commission (FPC) has reviewed the U.S. Department of the Interior's Draft Environmental Impact Statement concerning the "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (as proposed by SOHIO Transportation Company)", and offers the following comments.

SUMMARY SHEET

1 Page iii. In Item 2, which is a brief description of the proposed action, the following words should be added to the last sentence, "...and the Federal Power Commission for abandonment of existing interstate gas pipeline facilities."

2 Page iii. In Item 3 of Summary Sheet, it should also be identified that major oil spills could cause significant adverse impacts along the rest of the tanker route also, not just in Prince William Sound and along the southern California coast.

CHAPTER 1 - DESCRIPTION OF THE PROPOSAL

3 Page 1-1. The total estimated cost of the SOHIO proposal should be identified in the "Introduction" or in the "Detailed Description of the Project."

4 Page 1-2. In paragraph 2, "per day" should be added after "500,000 barrels".

5 Page 1-2. In paragraph 4 the second sentence should be changed to read, "Near Ehrenberg, Arizona, the pipeline would connect to a 669.3-mile long, 30-inch natural gas pipeline owned by El Paso Natural Gas Company which would link...".

6 Page 1-4. The second paragraph should be changed to read, "The Federal Power Commission (FPC) must act on application for abandonment of existing interstate natural gas pipelines which are part of this proposal. The FPC staff has assisted in the preparation of those sections of the statement dealing with the abandonment of the El Paso gas transmission pipeline. This and other authorizing actions are described in more detail in Section 1.3 of this chapter."

7 Page 1-8. The data presented in Table 1.1.1.1-1 regarding segregated ballast is confusing to the average reader. The table indicates that, for example, the 120,000 DWT tankers would have 35 percent segregated ballast when actually they would have 100 percent segregated ballast. The staff suggests that column 4 - "Segregated Ballast" in Table 1.1.1.1-1 be changed to read as follows:

Segregated Ballast
100%
100% b/
57% c/

8 In addition, the existing footnotes b, c and d should be eliminated and footnotes b/ and c/ (indicated above) should be inserted as follows:

b/ SOHIO 120,000 DWT tankers will have double hulls to reduce the possibility of piercing the cargo hull.

c/ In port tankers would take on 57% of the normal ballast in segregated tanks. Further ballasting would occur only after leaving port so as to prevent displacement of vapors into the port airshed.

9 Page 1-10. In the last paragraph, the use of "statute" miles in line 4 is not necessary unless all the other mileage figures refer to nautical miles. In any case, a standard notation should be used.

10 Page 1-13. Table 1.1.1.1-4 should be revised to differentiate between acreage which would actually be disturbed during pipeline and facility construction and acreage which is presently dedicated to the existing gas transmission pipeline rights-of-way, and would therefore not be disturbed. Acreage disturbed during construction should be based on the right-of-way width stated in Section 10 of the applicant's environmental assessment which is in most cases greater than 50 feet. This table should agree with the acreage listed in Table 3.1.12.1-2, Page 3-315.

11 Page 1-13. Table 1.1.1.1-4 neglects the new peak and valley pipeline bends which would be installed in the Guadalupe Pass. These segments deserve mention in order to quantify project magnitude and environmental disturbance.

12 Page 1-20. Figure 1.1.1.2-4 indicates an inland terminal storage tank volume of 653,000 barrels; however, Page 1-31 states this volume as 615,000 barrels.

13 Page 1-25. Figure 1.1.2.1-1 should show the Dominguez Hills Terminal rather than Hynes.

14 Page 1-26. The total tons of rock used in constructing the breakwater is stated as 1,450,000 on Page 1-26 and as 2,600,000 on Page 1-29. This inconsistency prevails throughout the text.

15 Pages 1-31 and 1-37. While amounts of fill required for the marine terminal have been indicated elsewhere in the document, overall quantities required for the proposal are not given. In addition, the locations of fill sources are not indicated and quantities of material to be excavated for onland construction are not given.

16 Page 1-35 to 95. The FPC staff believes that the breakdown of data on construction personnel, equipment, and fuel use by construction segment and distributing it into 26 tables throughout the text of Chapter 1 unnecessarily lengthens the document and increases the difficulty of both locating information and of comprehending the magnitude of the overall project requirements. This information should be combined and presented in 3 tables (rather than 26), as a summary of project requirements.

17 Page 1-40. The mileage and acreage required for new access roads involved with construction and maintenance of the pipeline and pump stations should be determined and presented in tabular form in the section entitled "Roads" on Page 1-40.

18 Page 1-42. On Page 1-42 and in other sections of the document, the term "gasline" is used. "Gasline" is not a word. Gas pipeline would be preferable.

19 Page 1-42. The location of each segment of the existing gas pipelines scheduled for conversion to oil transport should be indicated in Table 1.2.3.1-1 in a manner such that areas subject to a higher probability of pipeline leaks (such as El Paso lines 1103 and 1110 as identified in Appendix A1.0-1) can be easily identified.

20 Page 1-43. Section 1.2.3.1 should address the increased compression and compressor fuel requirements of the El Paso system following the abandonment of the natural gas pipeline.

21 Page 1-44. The correct wording for the second sentence on Page 1-44 is as follows: "Three 2-inch and one 1-inch right-of-way grantor taps in Arizona and one 1-inch right-of-way grantor tap in Texas and the gas service rendered by these taps would be abandoned as a result of the proposal."

22 Pages 1-46 and 1-47. It is stated that "special design consideration would be given to all major...crossings;" however, no further information is provided to enable an evaluation of the effectiveness or adequacy of possible designs.

23 Page 1-53. The nondestructive tests of production welds mentioned on Page 1-53 should be fully described. What percentage of the welds would be so tested?

24 Page 1-67. The discussion of the crude oil measurement system, Page 1-67, erroneously lists the leak detection threshold as .05 percent of the mainline flow. This leak detection threshold should be stated as .5 percent or 104 barrels per hour, as it is on Page A-24 and elsewhere in the DEIS.

25 Page 1-68. It is stated that "Manual valves may be closed in 10 minutes." It should be noted here that the closure of a manual valve would depend on a number of factors including identification of the exact valve location and travel time to the valve by maintenance personnel which could take considerably more than 10 minutes.

26 Page 1-96. The mileage and acreage required for new electrical transmission line right-of-way should be determined and presented in tabular form in the section entitled "Transmission Lines" on Page 1-96.

27 Page 1-96. The mileage and acreage required for new access roads to serve the proposed electrical transmission line extensions should be determined and presented in tabular form in the section entitled "Transmission Lines" on Page 1-96.

28 Page 1-107. The discussion of control systems beginning on Page 1-107 is seriously deficient in its description of the crude oil metering and control systems proposed by SOHIO. The three monitoring systems--flow rate metering, volume balancing monitoring, and hydraulic gradient analysis--should be fully described with emphasis on the monitoring system capability rather than equipment inventory. Perhaps the section on crude oil measurement on Page 1-67 could be combined with this discussion.

29 Page 1-111. The testing scenario described on Page 1-111 has not been used in the prediction of impacts from hydrostatic testing. Page 1-111 indicates that testing would be performed on 5-mile sections of pipeline; however, the volume of hydrostatic test water discussed on Page 3-37 and elsewhere in the text is for the entire 1,026-mile pipeline. Page 1-111 also indicates that well water (fresh) would be used in testing; however, Page 3-38 predicts impacts based on the use of saltwater.

30 Page 1-112. No hydrostatic test plan is available to judge whether this operation would be conducted in an "environmentally acceptable manner."

31 Page 1-112. On Page 1-112, it is stated that test water would be suitable for discharge into any waterway or contiguous watershed. However, Page A-19 and Page 3-38 indicate the need for treatment to remove contaminants and overcome low dissolved oxygen levels prior to discharge.

32 Page 1-116. Section 1.2.3.3 - Operation, completely lacks any description of tanker unloading, ballasting, inerting, purging, and safety procedures. These procedures, while described from a systems point of view in Appendix A.1.1.1.1, should be summarized and presented in this section with emphasis on the sequence of events rather than on operations centers and personnel requirements.

33 Page 1-119. The section on pipeline operations beginning on Page 1-119 should discuss the sequence of events leading to detection of a leak or rupture of the crude oil pipeline system. This discussion should indicate the time frame involved for each event.

34 Page 1-139. The first sentence of Section 1.3.1.3, Page 1-139, contains inaccurate wording with respect to the Federal Power Commission. A more accurate presentation would be as follows: "The operator of a facility involved in interstate transportation of natural gas must file an application with the Federal Power Commission for abandonment of facilities or service, under Section 7(b) of the Natural Gas Act, March 1, 1974 (18 CFR, Section 157.18 - Applications to Abandon Facilities or Service)."

35 Page 1-141. The sixth line in the first paragraph should read, "...adequate capacity in El Paso's and Transwestern's gas transmission systems...."

CHAPTER 2 - DESCRIPTION OF THE ENVIRONMENT

Section 2.1.1 - Climate

36 General - This section should contain data to support assumptions made in Section 3.1.6 concerning the impacts of the proposal on the Los Angeles Air Shed. Data for this section should at least include tables indicating wind rose data (percent wind by speed and direction) and frequency of occurrence of atmospheric stability classes.

37 Page 2-7. The approximate number of winter storms producing 40-knot winds should be specified to indicate the potential impact of these storms on the tanker operations and the proposed port facilities at Long Beach.

38 A table indicating the frequency of occurrence of reduced visibility (less than 2 miles) by month or season would be useful within the "Visibility" section.

39 Page 2-9. There appears to be a mistake concerning mean January temperatures which are identified as 2 to 5 degrees in the Southern California Coastal Region. This should be corrected. In addition, mean August temperatures should also be included.

40 Page 2-11. A discussion of mixing heights, along with a table (if available) should be included in this section.

Section 2.1.3 - Geologic Setting

41 Pages 2-54, 2-57. Data listed by Ziony, et al. (1974)[1/] indicate that fractures probably less than 11,000 years of age are present within the offshore portion of the Palos Verdes Hills fault zone (Palos Verdes fault of text). The County of Los Angeles (General Plan) and the State of California (Jennings, 1975)[2/] consider this fault to be potentially active and it should be considered in the design of the Long Beach Harbor port facilities.

42 Page 2-55. The Palos Verdes (Hills) fault is incorrectly located on Figure 2.1.3.2.1-1. (See Plate 1 of CDMC, Special Report 114 [3/] and Ziony et al. (1974).) Detailed locations of subsurface dislocations in Los Angeles Harbor were determined by Dames and Moore, (1974) [4/] and are reproduced on Figure 9, Volume 11 of the FPC Draft Environmental Impact Statement, Cook Inlet-California Project issued in September 1976.

43 Page 2-63. It is stated that "further study of the Newport-Inglewood fault zone is expected to justify lower design displacements...." No design displacements have been provided so that this statement is not meaningful to the reader. Design displacements should be provided in the FEIS for all active fault crossings, and the proposed methods for accommodating such displacement should be provided.

1/ Ziony, J.I. et al., Preliminary Map Showing Recency of Faulting in Coastal Southern California. U.S. Geological Survey Map MF-585, 1974.

2/ Jennings, C.W., Fault Map of California with Locations of Volcanoes, Thermal Springs, and Thermal Wells, 1975, California Division of Mines and Geology Geologic Data Map No. 1.

3/ California Division of Mines and Geology, Special Report 114, "A Review of the Geology and Earthquake History of the Newport-Inglewood Structural Zone, Southern California," 1974. A.C. Barrows, editor.

4/ Dames and Moore, Detailed Environmental Analysis Concerning Proposed Liquefied Natural Gas Facilities and Associated Gas Transmission Pipeline for Western LNG Terminal Company. 1974. Volume 1. Los Angeles Harbor, California.

44 Page 2-82. Table 2.1.3.3.1-1 presents "Earthquake Characteristics of Potentially Active Faults." The text should include a discussion of the source and method by which each entry was obtained. Note: the distances listed do not agree with Figure 2.1.3.2.1-1.

45 The discussion following the table incorrectly refers to the rock accelerations listed in the table as ground accelerations. No mention is made of the necessity for a ground response evaluation or dynamic response evaluation of the crude oil port facilities.

46 Page 2-85 (Also 3-21). Detailed studies of liquefaction potential should either be included in the FEIS or required as a mitigating measure for the portions of the route in California and the western portion in Arizona.

47 Page 2-89. Figure 2.1.3.3-2 is incorrectly referenced. The source is Greensfelder, R.W., Maximum Credible Rock Acceleration from Earthquakes in California. 1974. California Division of Mines and Geology Map Sheet 23.

48 Page 2-91. A convincing case for downgrading the maximum credible earthquake on the Newport-Inglewood fault from 7.5 to 7.0 is not made here. Other reports have supported a value of 7.5 (Wesson, et al. 1974, [1/] Los Angeles County General Plan) [2/] and such a value should be used.

49 Page 2-92. The Palos Verdes Hills fault should be added to the list of significant faults.

1/ Wesson, R.L. et al., Expectable Earthquakes and Their Ground Motions in the Van Norman Reservoirs Area, 1974, U.S. Geological Survey Circular 691-B.

2/ Los Angeles County General Plan, Seismic Safety Element, adopted January 30, 1975.

Section 2.1.5 - Water Resources

50 General - A substantial amount of extraneous or minimally useful information has been included in the description of the existing water resources. The volume of material could be reduced and the reading made less cumbersome by restricting topics of discussion to those actually relevant to the potential impact of the project, and by placing less emphasis on areas where impact is expected to be insignificant.

51 Page 2-206. Much of the discussion of dams in relation to the lower Colorado River is meaningless simply because the locations of the dams in relation to each other and to the proposed pipeline are not indicated either in the DEIS or in the map attachments. A graphic similar to Figure 2A.5-4 from the Sohio Environmental Impact Assessment Report would clarify the information. In addition, much of the text could be deleted by including the information in the graphic.

52 Page 2-212. The entire subsection on the existing groundwater resources could be worthwhile except that the complexity of the anticipated impact does not warrant such detail in the existing environment section.

Section 2.1.7 - Vegetation

53 General - The description of the existing vegetation contains far too much detail on topics of little significance. Often the value of the pertinent detail is lost by confused writing and inadequate background. In several subsections, data is presented for various named locations, but apparently the author presumed (incorrectly) that all locations are known to all who read the DEIS. Without knowing where places are in relation to the project, the information is useless.

Section 2.1.8 - Wildlife

54 General - (1) The two sections on marine mammals, beginning on Pages 2-486 and 2-518, respectively, should be combined to avoid redundancy.

55 (2) It is understandable that information about the marine fauna of Prince William Sound and portions of the

55 proposed tanker route must be extrapolated from other areas, such as the Kodiak-Alaska Peninsula area, because relatively little is known about the specific areas the DEIS wishes to describe. Life history information gathered in a different area could be fairly applicable to the project area provided the species are the same. However, it is difficult to perceive how the commercial size limits, harvest methods, and annual harvest tonnages of the Kodiak and Alaska Peninsula fisheries relate to a project area that lies 200 to 500 miles away. Throughout the "Description of the Existing Environment," no reference was made to commercial harvests of invertebrates in Prince William Sound or adjacent portions of the Gulf of Alaska, while the discussion of fish and fisheries in those regions was confined to a single paragraph (Pages 2-516 and 2-517). Since no reference was made later in the DEIS to impacts that would occur in the Kodiak-Alaska Peninsula area, perhaps it would be better to concentrate on describing the area that would be affected.

56 (3) This portion of the DEIS is overloaded with raw scientific information which is not analyzed as to its significance in relation to the proposal. This makes it an impressive but uninformative document for most of its intended readers. Much of the data presented cannot be used by a decisionmaker until it is properly summarized (to decrease its length) and interpreted (to increase its comprehensibility).

57 Pages 2-413 to 2-415. The DEIS fails to provide the locations of "Ocean Station P" (Cooney, 1971), "Ocean Station Papa" (LeBrasseur, 1969), "Station P" (McAllister, 1969), "the Central Subarctic Domain" (Larrance, 1971), "the northeast Pacific" (Gulland, 1971), and "the coastal areas of the Gulf of Alaska" (Gulland, 1972). What is the area frequently referred to in Volume II, Chapter 2 of the DEIS as "the western Gulf of Alaska?" Where are all the above locations in relation to the area that would be affected by the proposed action? A map showing the above locations would enable the reader to better comprehend the text and understand its relevance.

58 Pages 2-508 to 2-510. Table 2.1.8.1.2-1 should be better identified so as to indicate the area under discussion (presumably the southern California coast) and the nature of the organisms listed (presumably small pelagic invertebrates).

Section 2.1.12 - Land and Water Uses

General - There is so much detail in the "Description of the Existing Environment" in relation to land and water uses that the reader gets weighed down and finds it hard to get a concise view of what's going on in the area.

59 The coverage of material seems to be inconsistent. For example, in one subsection the topics of "Prince William Sound" and "the sea leg" are discussed while in other sections these areas are not mentioned.

60 Many of the terms appearing in the "Existing Environment" section are used many times before they are finally defined. Land classification terminology should be defined when it first appears so the reader knows what the writer has in mind.

61 Page 2-805. Mention is made that only 17 miles of Santa Barbara County's coastline are open to public recreational activity. When some of the details of these recreational areas are presented, reference is made to 9.5 and 10-mile sections which total more than the originally stated 17 miles. There seems to be some inconsistency.

62 Page 2-814. Item 5 seems to be worded incorrectly.

63 Page 2-829. The first full sentence on this page indicating that "the route does not traverse any area of mineral production ..." contradicts the sentence under the "Pipeline Route" section on the proceeding page which indicates that "the pipeline route will trace through land areas where common variety minerals ... are being mined at present." Specific mineral production areas should be identified.

64 Page 2-831. The paragraph preceding Table 2.1.12.6-2 indicates that land uses for L.A. County will be broken down into three geographical sections, yet the following discussion and the referenced table only cover two of these sections.

65 Page 2-835. The title of Table 2.1.12.6-3 indicates that the listing of the municipalities traversed by the pipeline route is for the entire county but the text preceding this table indicates it is only for the first 20-mile segment through the county.

66 Page 2-836. It is stated that the proposed route is "within the San Gabriel River." If this is correct, the hazard to the pipeline should be discussed in detail.

67 Page 2-836. "Approximately 1.9 miles of the proposed route, within this 11.5-mile area, traverses unincorporated area." The term "unincorporated area" should be defined so the reader knows what the writer has in mind.

68 Page 2-847. In the last paragraph on this page, the descriptions of the existing pipeline crossings of three scenic highways are not clear and should be rewritten in a manner that better describes the locations of the crossings.

69 Page 2-858. Why are the descriptions of "land use classifications" put in the "Arizona" subsection? It would seem to make more sense to have this definition-type information occurring at the beginning of the land use section so the reader would be made aware of the precise concepts with which the writer is working.

Section 2.1.13 - Use Plans, Controls and Constraints

70 Page 2-860. The statement is made that 29 percent of the land traversed in the three-county region of California is planned for urban use and 7.5 percent is planned for nonurban uses. What is the planned land use for the other 63.5 percent of the land crossed in California?

71 Page 2-860. In the second paragraph on this page, there is a percentage breakdown of the "planned land use classifications... which the pipeline route traverses." Is this a percentage breakdown for the entire pipeline system or for only that section of pipeline in California?

Section 2.1.14 - Transportation Networks

72 Page 2-873. The list of collisions and resulting damage to vessels in Los Angeles/Long Beach Harbor is insufficient to determine the effect of these collisions on harbor traffic. Although the section indicates that collisions are infrequent, it may be more helpful to indicate the infringement on harbor traffic due to collisions during the 3-year period.

73 Page 2-874. A reference to Figure 2.1.14.2-1 under the "Street System" section indicates that it is a figure of the arterial street system of the Long Beach area. This figure is a map of crude oil pipelines. A map of the street system should be included for reference of the remainder of the section.

74 Page 2-880. Reference to the "cordon" boundaries of the study area is confusing and should be reworded. Also, the levels of service on the north-south surface street system should be quantified in terms of design capacity as is done for the east-west system.

75 Page 2-882. The sections on "Highways" and "Railroads" commencing on this page are repetitious and a list of highways and railroads crossed by the proposed pipeline has already been included in Chapter 1 in Table 1.2.3.2-1.

76 Page 2-885. The section on "Water Transport" should be included only if a significant amount of vessel traffic uses the impacted waterways. If this is the case, then the amount of traffic using the waterways should be indicated in this section.

Section 2.1.16 - Socioeconomic Conditions

77 General - This section could be shortened considerably by presenting in detail only those current factors which will be impacted by the project (e.g., the number of construction workers available, commercial fishing information). Much of the other detailed information in this section does not contribute much to evaluation of the project.

Statistical factors expressed by county are of little value for determining pipeline impact. In large urban counties such as Los Angeles, census tract figures should be presented.

78 Page 2-933. The last sentence on this page appears to be incomplete.

79 Page 2-939. The statement that "Pipeline construction employees along the proposed route would probably utilize this county as a major service center" appears to be based on the fact that more than 50 percent of the Dona Ana County workforce is engaged in service-related occupations. The statement conflicts with statements in Section 3.1.16.3 which indicate that only relatively minor new service demand will be generated by the project and that this demand will be distributed throughout the pipeline route.

80 This section also refers to a possible local labor shortage due to the scarcity of workers in the construction field in Lea County, New Mexico. However, Section 3.1.16.3 points out that much of the demand locally will be for unskilled labor, which should be readily available. Also, in the tri-county area including Jal, New Mexico, construction workers are plentiful. Therefore, a local labor shortage for such a short-term project should be considered unlikely.

Section 2.1.16.5 - Energy Supply and Demand

Natural Gas

81 Page 2-1014 (First paragraph under "Natural Gas"). Reference to Canadian imports. If it is felt that a mention of Canadian imports is necessary it should be emphasized that approximately 40 percent of the requirements of northern California are met by Canadian imports. (See 1976 California Gas Report.)

82 Page 2-1014. The reference (in paragraph 2 under "Natural Gas") to Figure 2.1.16.5-20 which supposedly is a figure showing historic natural gas production in the U.S., is incorrect. Figure 2.1.16.5-20 shows average annual interstate and intrastate natural gas reserve additions in U.S., not production. A figure showing natural gas production in the U.S. should be included in the FEIS.

83 Page 2-1017. Beginning with the second full paragraph, the natural gas supply/demand "picture" in southern California is discussed. Whereas this discussion is not entirely incorrect, it presents only a portion of the current situation in the State of California. Both northern and southern California receive large quantities of gas from El Paso and subsequently would both be affected by any change in El Paso's gas supply. There are also intercompany sales and exchanges of gas between Southern California Gas Company and Pacific Gas and Electric Company which are used to offset gas supply deficiencies throughout the entire state. As a result of the integrated nature of El Paso gas deliveries to northern and southern California and the interconnection of the SoCal and PGE gas transmission systems, a complete analysis of the existing and future natural gas supply/demand "picture" should also include northern California.

84 It should also be noted that the Indonesian LNG and Pacific Alaska LNG projects and the North Slope Increment identified in paragraph 3 represent gas supplies that would be divided between SoCal and PGE, not all of this gas would go to southern California.

85 Page 2-1018. The "new" gas supplies identified in footnote "a" would also be shared, in most cases, with northern California and do not represent gas supplies which would be dedicated solely to southern California customers.

CHAPTER 3 - ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

Section 3.1.2 - Major Ecosystems

86 General - Since an ecosystem which has fully recovered from past disturbance could be as significantly impacted as a "natural" ecosystem, BLM should be more specific when identifying areas which have been previously impacted. If possible, briefly describe the type of action which caused the impact and indicate the types of impact previously sustained. It would also be helpful to know whether the affected ecosystems have had time to recover.

87 Pages 3-13 and 3-15. BLM indicates that limited natural ecosystems exist along the proposed pipeline and that these areas would sustain the most severe impact of the terrestrial ecosystems. The description of the existing ecosystems should specify the locations of these natural areas and more fully describe them.

88 Page 3-17. In the last paragraph, it states that the impact of maintenance dredging would be less significant than those occurring during construction. No other reference to a potential need for maintenance dredging could be found in the DEIS and there does not appear to be any reason to expect maintenance dredging to cause a less significant impact than construction activities especially if dredging took place on a recurring basis.

Section 3.1.3 - Geologic Setting

89 Page 3-21. The discussion of tsunami hazard should be expanded to include the type and magnitude of expected damage, time available for warning, and measures to mitigate impact.

90 Page 3-23. Evaluation of the adequacy of design to avoid scour problems cannot be made because no scour information is given for specific streams. This information should be included in the FEIS.

91 Page 3-24. The discussion of "subsidence and differential settlement" should be expanded to address the hazard resulting from subsidence in karst areas in New Mexico and Texas.

92 Page 3-27. The discussion of "surface fault displacements" is deficient. It should include the values of surface displacement which the proposed pipeline would be designed to withstand at all active or potentially active faults. The Newport-Inglewood fault should be included.

Section 3.1.4 - Soils

93 General - The impacts on soils resulting from the abandonment and removal of the natural gas facilities at the Bowie and Oracle Compressor Stations and the five right-of-way grantor taps on El Paso's system should be identified. In addition, the impact on soils resulting from the installation of pipe bends in Guadalupe Pass in Culberson County, Texas, should be identified.

94 Page 3-34. The impact on productivity due to wind erosion is presented in a contradictory manner. In the second paragraph, it states that wind erosion and loss of productivity resulting from construction would continue for a year or two until a protective pavement is again formed. In the fifth paragraph, it states that wind erosion occurring during the grading, excavating, and backfilling operations would have "no measurable impact on productivity." The impact on productivity should be determined for the period of time that it would take for wind erosion to subside to preconstruction levels.

95 Page 3-37. In the first paragraph, the impact on productivity due to wind erosion should be determined for the period of time that it would take for wind erosion to subside to pre-construction levels, as in the comment for Page 3-34.

96 Page 3-41. On line 9 it states, "Maximum length of span that can be safely tolerated under this weight is about 40 feet which is exceeded at the present time at several locations with the existing gas pipeline." The types and locations of crossings the statement refers to should be identified and if supporting structures would be constructed to make the proposed crossings safe.

Section 3.1.5 - Water Resources, Quality and Use

97 Page 3-53, Lines 23 and 24. It is stated that "The worldwide tanker accident rate per trip is about 4.4 per 1,000 trips, and the rate for accidents in port areas is about 2.65 per 1,000." This statement is incorrect. The tanker casualty rate of 4.4 per 1,000 trips was derived by Oceanographic Institute of Washington (OIW) from an analysis of seven major U.S. ports and estuaries (Offshore Petroleum Transfer Systems for Washington State, OIW, Dec. 1974). It is not a worldwide tanker accident rate, but rather a rate specific to U.S. ports. Therefore, the adjusted tanker casualty rate for port areas of 2.65 per 1,000 trips is incorrect. The "port specific" accident rates shown in Table 3.1.5.1.1-1 are correct and should be used.

98 Page 3-53, Line 25 to 3-54, Line 2. It is stated that "The port of Long Beach has a very low accident rate. There have been no accidents involving collisions or groundings in more than 10 years, and no tanker rammings in the past 10 years." This statement is incorrect and conflicts with a U.S. Coast Guard printout of vessel casualties in southern California waters, prepared for the FPC. During the period fiscal years 1969-1975, three rammings (USCG Case Numbers 10023, 32052, and 52225) and one collision (USCG Case No. 52656) occurred among tankers having a draft exceeding 18 feet.

99 Page 3-54, Table 3.1.5.1.2-1. The ship accident rates in this table which are attributed to the USCG do not appear in the referenced source: U.S. Coast Guard, Vessel Traffic Systems, Analysis of Port Needs, August 1973. The correct reference and/or their derivation should be included in the FEIS.

100 Page 3-54. Table 3.1.5.1.2-1 inadequately describes the source of information attributed to the Federal Power Commission. A more correct description would be as follows: Federal Power Commission, FEIS - Alaska Natural Gas Transportation Systems, App. A, Vol. 1, 1976.

101 Page 3-55, Table 3.1.5.1.2-2. The projected tanker accidents presented in this table are based on the inappropriate use of the tanker casualty rates described on Page 3-53 (refer to FPC comment, Page 3-53, lines 23 and 24). The use of the casualty rates in Table 3.1.5.1.2-1 would increase the projected tanker casualties (collisions, rammings, and groundings) for Valdez

101 by about 25% and would double to triple the projected casualties for Long Beach, depending on the casualty rate selected. For example, the projected tanker accidents in Long Beach for a 10-year period may be calculated from the tanker casualty rate (from OIW) in Table 3.1.5.1.2-1 and the projected annual trips from Socio-Economics Systems:

(2.3 accidents/1000 trips)

x (2673 trips/10 years)

= 6.15 accidents/10 years

This result is nearly double the accident rate (3.1 accidents in 10 years) presented in Table 3.1.5.1.2-2, while use of the USCG accident rate would more than triple that rate.

102 Page 3-55, Line 8 and 9. As a result of the errors cited in FPC comments concerning Page 3-55, Table 3.1.5.1.2-2, "2.3 accidents per year" for the overall tanker rate is not correct.

103 Page 3-56, Table 3.1.5.1.2-3. The tanker accident rates presented in this table appear to follow correct derivation procedures and clearly demonstrate inconsistencies with the previous table. Although the accident rate for Valdez listed in Table 3.1.5.1.2-3 is double the rate presented in Table 3.1.5.1.2-2, it is based on only 40 percent more tanker trips. Table 3.1.5.1.2-2 should be recalculated with the method used to develop Table 3.1.5.1.2-3.

104 Page 3-59, Table 3.1.5.1.2-6 and Table 3.1.5.1.2-7. These tables present probabilities of tanker spills along with average spill volumes. According to Socio-Economic Systems, Inc. (SES), "From these results, it is clear that the average volume per spill is not a meaningful number" (SES, 1976, page 38). Historically, the size range of tanker spills is very large and the resulting impacts on marine ecology would vary considerably. Rather than listing average spill sizes, a better presentation would relate spill probabilities to various ranges of spill sizes up to the loss of a tanker's entire cargo.

105 Page 3-95. The predicted pipeline oil spill volumes listed in Table 3.1.5.2.2-1, Page 3-95, appear lower than information in the text would indicate. A rupture at the Whitewater River, according to Table 3.1.5.2.2-2, Page 3-96, could release 13,428 barrels of oil. The 10-year maximum spill due to a rupture listed in Table 3.1.5.2.2-1, however, is only 9,000 barrels. Furthermore, the figures in Table 3.1.5.2.2-1 indicate

105 that a leak below the detection system threshold would spill an average of 22.5 barrels. Considering that up to 100 barrels per hour could leak without system detection, the 22.5-barrel per spill figure appears unrealistically low.

106 Page 3-96. Table 3.1.5.2.2-2, Page 3-96, should include the Kofa Game Range as a sensitive location of a potential spill estimated at 40,200 barrels in the July 30, 1976, attachment prepared by Williams Brothers Engineering. The spill volumes listed in this table should be revised to include the potential volume (694 barrels) spilled during the 2-minute computer scan period associated with Sohio's monitoring system. The July 30 attachment does not indicate consideration of the 2-minute scan period.

Section 3.1.6 - Air Quality

107 General - This section of the DEIS has incorporated the majority of the FPC comments on the preliminary draft. The analysis is generally adequate with the exception of the "worst case" meteorology used in the analysis of short-term impacts from tanker operations. Maximum 1-hour and 3-hour concentrations of SO_2 and particulates were estimated in the DEIS for a high windspeed, neutral atmosphere (Page 3-130); however, an unstable atmosphere and lower windspeeds would yield even higher concentrations, and the maximum concentrations would occur with fumigation. Estimates for the above conditions should be included in the FEIS.

108 In addition, the air quality impacts which would result due to the additional mainline fuel requirements on El Paso's system and the subsequent reduced deliveries of natural gas to California should be identified.

109 Page 3-121. Line 8, "(0.08 pphm, one-hour average)" should be "(0.08 ppm, one-hour average)."

Section 3.1.7 - Vegetation

110 Have the El Paso compressor stations been considered in the impact analysis? The FEIS should reflect the potentially beneficial impact of abandoning and removing the Bowie and Oracle Compressor Stations. El Paso owns 40.0 and 36.9 acres of land at the two respective sites. With the possible

110 exception of two six-room houses at each site, all equipment, plant structures, fencing, and piping would be abandoned from natural gas service and removed. There would be approximately 150 feet of new pipeline installed to provide underground continuity of the oil pipeline system at the Bowie Compressor Station site. At the Oracle Compressor Station site, approximately 200 feet of new oil pipeline would be installed underground. Following the abandonment and construction, both sites would be allowed to revegetate by natural encroachment and succession.

Section 3.1.8 - Wildlife

111 Potential impacts to wildlife from the proposed removal of compressor stations, grantor taps and associated metering facilities for El Paso's system should be identified in the FEIS.

Section 3.1.9 - Cultural Resources

112 Page 3-273. In the first paragraph, potential impact of abandonment of the gas pipeline on archaeological resources will most likely be in the area of the two compressor station's and several mainline valves which are planned for removal. Existing maintenance and access roads would probably be used for this work, and while no threat is likely to prehistoric sites that has not already been realized, there is the possibility that equipment will disturb surface areas unaffected by the original construction. The Bureau of Land Management, as lead investigator, should determine the areal extent of impact, if any, expected in these removals and, if it is of sufficiently large magnitude, require mitigating measures to be carried out.

Section 3.1.10 - Visual Resources

113 The visual resource aspect of the project has been handled well, except that the proposed compressor station removals have not been considered in the text. The policy of limiting the description of the existing visual environment

113 to the corridor potentially impacted is exactly the type of policy which should have been used throughout the impact statement. The discussion of visual impact is equally good; it is straightforward, substantive, and contains very little padding. The BLM method of handling such a subjective topic is commendable.

114 To be a complete discussion, the methodology used for the pump stations should be applied to the proposed abandonment and removal of the Bowie and Oracle Compressor Stations.

Section 3.1.11 - Noise

115 Page 3-302. The section should mention that as a result of the proposed gas pipeline abandonment, noise emissions associated with increased compression requirements would occur at a number of existing compressor stations on the El Paso gas transmission system.

Section 3.1.12 - Land and Water Uses

116 General - There needs to be more detail presented in the impact section indicating how this project will effect land use along the route. The major comment made throughout the impact section is that there would be noise and dust problems during construction. However, the "unavoidable impacts" section gives considerably more impact detail than that. It would seem that this "unavoidable impacts" detail belongs in the impact section (Chapter 3).

117 More detail is needed describing the impacts to land use from the abandonment of existing compressor stations which would not be required for the conversion of the pipeline system. What specific abandonment steps are going to be taken at which specific stations and how will local land use be affected? (See comment on Section 3.1.7 - Vegetation.)

118 In addition, more detail needs to be added describing the impacts to land use for each crude oil pump station which would be used for the new system. No specific mention is made of the land uses in the areas to be used for pump stations in Arizona, New Mexico, or Texas. More detail is needed.

119 There are pages and pages of material relating to the land use impacts of the pipeline, but the impact to the Midland terminal site is described in one sentence on Page 3-321. Land use impacts at the terminal sites should be presented in more detail.

120 Page 3-314. The lead sentence on this page indicates that the pipeline would follow the easterly side of the Flood Control Channel avoiding potential disruptions to recreational land use proposals along the east side of the channel. This seems to be contradictory.

121 Page 3-314. (Reference 2nd paragraph) The mileage percentages are approximate and should be so identified. In addition, the 64.2-mile figure in line 10 is incorrect and should be changed to: "The remaining 25 percent or 61.8 miles of proposed pipeline...." Also, the end of the sentence should identify that approximately 8.4 percent of the distance of the proposed pipeline would traverse open space lands.

122 Page 3-317. The first paragraph below Table 3.1.12.1-3 indicates that 23.6 miles plus 35 miles is 75 percent of the length of the pipeline crossing the State of California within or adjoining transportation corridors. This 75-percent figure would be accurate if the 121.8 miles of existing pipeline to be converted were added to the 23.6- and 35-mile lengths.

123 Page 3-318. Either the references to Table 3.1.12.1-4 and Table 3.1.12.1-6 in paragraph 1 are incorrect or the tables are incorrect. This discrepancy should be corrected in the FEIS.

124 Page 3-320. Reference to Table 3.1.12.1-4 should be a reference to Table 3.1.12.1-5.

125 Page 3-322. Mention is made of the impact upon land use from the development of pump stations on open space land. However, the statement goes on to say that "these sites are also consistent with local and county future land use plans." Does this mean that the county is going to change the open space designation just to accommodate the new pump stations which would be of an industrial nature, or that these areas are or will be zoned industrial regardless of the SOHIO proposal?

Section 3.1.14 - Transportation Networks

126 Page 3-343. The section entitled "Parking" presents a plan that would accommodate the parking requirements of employees, but does not indicate whether such a parking lot is included in harbor planning. If not, increased employee traffic could have an impact on the surrounding neighborhood.

Section 3.1.15 - Utility Networks

127 Page 3-351. The last paragraph on this page is a repeat of the last paragraph on Page 3-350.

128 The impact of the use of 87 million gallons of domestic water for hydrostatic testing is not adequately examined. Some determination should have been made as to where the water would come from and the impact of this demand on the source. Failing that, the impact of the demand on both Long Beach and Dominguez should be examined. In either case, adequate mitigating measures for the effects of this drawdown should be developed.

Section 3.1.16 - Socioeconomic Conditions

129 Page 3-353. This section should mention the potential siting of an oil refinery along the pipeline route. This possibility is mentioned briefly on Page 1-162.

130 Page 3-368. The last sentence under "Community Services" appears to be in error. If new construction would result in other than minor impacts, then they should be specified.

131 Page 3-378. Discussion of the impacts of construction under the "Gila Pump Station" section is confusing and disjointed and should be reworded.

Section 3.1.16.5 - Energy Supply and Demand

132 Page 3-391. The FPC staff reiterates its comment that northern California and the Pacific Gas and Electric Company gas supply and demand should be included in the analysis because both northern and southern California are dependent on El Paso for large quantities of gas and both could be adversely affected by alterations in El Paso's system. (See FPC comment on Page 2-1017.)

133 Page 3-391. After the first sentence under the subsection "Natural Gas", a statement should be added which identifies the following: "However, the transportation of gas through El Paso's system after the proposed abandonment would require increased mainline fuel consumption as a result of increased compression requirements in the smaller capacity transmission system. Estimates, based on El Paso's projected sales for future years with and without the proposed abandonment, show that the additional mainline fuel requirements would equal 8,740 million cubic feet per year, 7,220 million cubic feet per year, 5,940 million cubic feet per year, and 5,190 million cubic feet per year, in the first four years, respectively, following the abandonment. By the 19th year after the abandonment, the additional mainline fuel requirements would have dropped to less than 500 million cubic feet per year. El Paso's deliveries of natural gas to its customers would be reduced by an amount equal to the additional mainline fuel requirements."

134 Page 3-394, 395 and 396. In Item 2, the "Arctic Gas Pipeline," it should be noted that about 637 million cubic feet per day, not 447 million, would be allocated to the State of California. Of this total, SoCal would receive about 437 million cubic feet per day and PGE would receive about 200 million cubic feet per day. This transportation of gas in the "Arctic Gas Pipeline," as proposed, would be accomplished by construction of a complete loop (917 miles) of the Pacific Gas Transmission Company mainline.

135 In Item 5, which is described as the "Arctic Gas/Midwest alternate," and has been proposed by the FPC staff, about 601 million cubic feet of gas per day would be transported directly to California through the use of excess capacity which is expected in the Pacific Gas Transmission system due to a fall-off in Canadian gas imports into the U.S. Only 36 million cubic feet per day would need to be transported through the El Paso system by displacement to equal California's total allotment of North Slope gas.

135 It is only if there was not a fall-off in Canadian gas imports that the excess capacity would not be available in PGT's system, and that is considered by the FPC staff to be unlikely. Therefore, in Tables 3.1.16.5-5 and 3.1.16.5-6, the addition of 447 million cubic feet per day of gas onto El Paso's Permian Basin sendout is not a realistic situation. It was presented by the staff only as an illustration of the capability of the Northern Border system to displace additional gas to California should the need arise. This should either be identified as such in the FEIS or should be eliminated from the tables.

136 Note: On Page 75 of Volume 8 of the DEIS, which is the Energy Supply and Demand Final Report by Environmental Research and Technology, Inc., the "Arctic Gas Pipeline" scenario has been incorrectly described. The proposal by Arctic Cas involves the construction of a major loop, 917 miles in length, on Pacific Cas Transmission Company's mainline in order to transport about 637 million cubic feet of gas per day (not 447 million).

137 Also, on Page 86 of Volume 8, the "Arctic Gas/ Midwest" acenario has been incorrectly described. The FPC staff has proposed that existing capacity in PGT'a aystem be utilized to transport the gas instead of constructing the mainline loop as proposed by Arctic Cas. Therefore, the North Slope gas would be transported directly to California.

138 As mentioned in the FPC staff's comments above on Pages 3-394, 395 and 396, only if there was no fall-off in Canadian imports into the U.S., would a large demand be put on El Paso's system and this is not considered likely.

CHAPTER 4 - MITIGATING MEASURES

Section 4.0 - Introduction and Methodology

139 Page 4-3. Clarification is needed between the first full paragraph of Page 4-3 and the fourth paragraph on Page 4-58. The latter paragraph appears to say that Federal and state mandates require full mitigation "...for all affected land, regardless of ownership," and that this has been confirmed by the relevant agencies. Page 4-3 says that these agencies do not have all-inclusive authority to enforce mitigating

139 measures on some private lands, and that this would depend upon acceptance by the landowner. If Page 4-3 is accurate, the staff suggests that BLM investigate requiring that the right-of-way agreements stipulate a grant of permission by the landowner to utilize and enforce mitigating measures, or at least require the applicant to solicit such permission.

Section 4.1.2 - Geology

140 Page 4-3, Item 2. The applicant proposes to locate all structural facilities outside the San Andreas, and San Jacinto fault systems. The staff also suggests that such facilities should not be located within the Newport-Inglewood fault zone, especially those portions within Alquist-Priolo Special Studies Zones.

Section 4.1.3 - Soils

141 Page 4-4. It is indicated that Sohio plans to use one of nine available systems for detecting small subsurface pipeline leaks. Either the actual method which would be employed or the nine available systems should be described in Chapter 1, Section 1.2.3.3 - Operation.

Section 4.1.5 - Air and Noise Quality

142 Page 4-5. The term "appropriate noiae auppresaion devices" should be defined.

Section 4.2 - Measures Required By Federal, State or Other Agencies

143 Page 4-8. Since the State of Alaska's mitigating measures identified in Itema 1 and 2 are apparently subject to challenge in the courts and may not be implemented, the FPC staff suggests that BLM require similar mitigating measures for all tankers involved in the trade from Valdez to the propoaed facilities in Long Beach. In addition to the mitigating measures identified in Items 1 and 2 on Page 4-B, the FPC staff also suggests that double-bottom hull structures and gas inerting systems also be required for all tankers transporting crude oil along the Valdez to Long Beach route.

Section 4.2.2 - Port of Long Beach and Terminal Area

144 Page 4-11. There is apparently an inconsistency between Item 3 on this page and Item 4 on Page 4-12. The FPC suggests that Item 3 be eliminated in favor of Item 4 which requires at least 20 percent segregated ballast on all tankers using the proposed berthing facilities.

Section 4.2.3 - Pipeline Route California

145 Page 4-17, Item 1. A magnitude 7.5 earthquake on the Newport-Inglewood fault should be used in design. In addition, the specification of a magnitude alone is not sufficient to describe the seismic design of facilities or to support the "anticipated effectiveness" stated on this page. The measure should include design accelerations at bedrock and stipulations as to how foundation level shaking should be determined for design.

Section 4.2.4 - Pipeline Route Arizona

146 Page 4-32 and 4-34, Item 2. The Federal Power Commission (FPC) has been identified as having jurisdiction over elimination of the powerline extension to the Ehrenburg Pump Station. The FPC has no authority to require that the powerline extension going to the crude oil pump station be eliminated in favor of onsite power generation. However, it should be noted that if either SOHIO or El Paso file applications with the FPC pursuant to Section 7 of the Natural Cas Act for the sale of natural gas, the FPC would evaluate whether it would be allowable to use natural gas from El Paso's system to provide power at selected crude oil pumping stations.

147 Page 4-38, Item 1. The Federal Power Commission has no authority to require the use of landscaped berms around the Cila Pump Station.

Section 4.2.5 - Pipeline Route New Mexico

148 Page 4-46, Item 1. The FPC has no authority to require that the powerline extension going to the Pecos Pump Station be eliminated in favor of onsite power generation. (See FPC comment concerning Ehrenburg Pump Station on Page 4-32.)

Section 4.2.6 - Pipeline Route Texas

149 Page 4-48. The FPC has no authority to require that the powerline extension going to the Guadalupe Pump Station be eliminated in favor of onsite power generation. (See FPC comment concerning Ehrenburg Pump Station on Page 4-32.)

Section 4.2.7 - General

150 Page 4-53. The BLM proposed mitigating measure for remote control valves should identify the maximum distance from each location that the remote control valves should be installed and whether valves should be installed, 1) on both sides of each location, 2) on only the upstream side, or 3) with a combination of a remote control valve on the upstream side and a check valve on the downstream side of each location.

151 Page 4-58, Item 1. The FEIS should define the term "full and complete" and how it would be determined that such "full and complete" mitigation efforts were indeed accomplished. For example, it often happens because of the hurried character of salvage work that the only sites excavated are larger habitation areas, thus giving a misleading picture of site types. The need for a full representation of activity areas should be identified in BLM's proposed "Mitigating Measures" section.

152 Page 4-59. A potential for great loss exists where the pipeline crosses areas of late Pleistocene lakes and marshes, areas that were heavily exploited by Paleo-Indian bands (DEIS: p. 2-747). Unfortunately, the traces left by these small social groupings are usually unobtrusive and easily missed unless an exceptional effort is made during the right-of-way survey. In view of the usually fortuitous discovery of Early Man sites, the staff suggests that BLM require that in the archaeological survey and salvage work, the applicant be responsible for generating a predictive model for Paleo-Indian sites along all or part of the pipeline corridor especially of high potential, and sufficiently in advance of construction to allow full investigation of any discovered sites.

CHAPTER 5 - ADVERSE IMPACTS WHICH CANNOT BE AVOIDED

Section 5.6.1 - Air Quality

153 Page 5-11. The air quality impact in California which would occur as a result of additional mainline fuel requirements on El Paso's system and subsequently in reduced natural gas deliveries to El Paso's customers should be identified.

Section 5.9 - Cultural Resources

154 Page 5-28 (second paragraph). A frequent complaint is echoed with BLM's comment that salvage archaeology "... is rarely as effective as nonsalvage research because of limited time, funding, and personnel levels." The FPC staff suggests that BLM should at some point in its statement aggressively address this chronic problem by requiring the budgeting of sufficient time and money (including a discretionary contingency fund), scheduling of survey and salvage work in the appropriate seasons, and reviewing the proposed research design to maximize the quality of data. The simple existence of a law does not guarantee protection against the needless waste of these diminishing cultural resources.

CHAPTER 7 - IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

155 Page 7-8. The FEIS should address the irretrievable additional mainline fuel use on El Paso's gas transmission system following the proposed abandonment. El Paso estimates a total additional fuel use of 68.2 billion cubic feet over the first 19 years of operation commencing April 1977.

CHAPTER 8 - ALTERNATIVES TO THE PROPOSED ACTION

156 Page 8-58. In the subsection on "Maritime Environment", it is identified that the Port Hueneme area has a moderately high volume of ship traffic of 3,300 ships per year. This ship traffic volume is also stated for the Estero Bay and Avila

156 Beach alternate sites. A reference should be given for this ship traffic volume, and the characteristics of the ships, i.e., size and type of vessels, should be identified in the FEIS. It should also be identified that the 3,300 ships per year does not represent shipping traffic into these local port areas, but rather coastal ship traffic which travels along the California coastline. Therefore, this ship traffic would be common to all sites along the coast.

157 From Waterborne Commerce of the United States, U.S. Army Corps of Engineers, Part 4, 1974, the volume of local tanker traffic for the Port Hueneme, Estero Bay and Avila Beach sites should be identified as 54, 179, and 96 tankers, respectively.

158 Page 8-60. In the description of land use, it should be noted that the Ormond Beach area does have industrially zoned areas where significant land use conflicts would probably not occur. In addition, proper construction procedures can avoid significant impact to the dune habitat.

APPENDICES

159 Page A-27. The seven fault tree diagrams referred to on Page A-27 are missing and should be included in the FEIS.

160 Page A-287, line 3. Equation "$P = \frac{n}{24} p^m$" should be expressed: "$P = \left[\frac{n}{24} P\right]^m$" in order for the results of the calculation in Line 11 to be accurate.

Appendix A 3.1.6

161 Page A-292. The emission factors for heavy duty gasoline-powered vehicles listed in Table A3.1.6.1-13 are not presented in the referenced source (EPA, AP-42) on a fuel consumption basis. A derivation of these emission factors should be included in the FEIS.

Map Volume

162 Map 2.1.3-1. By reference to Ziony, et al., 1974, and the FPC DEIS concerning the Cook Inlet-California Project, the Palos Verdes (Hills) fault zone may be shown to be continuous through Los Angeles Harbor.

163 As a final general comment, the FPC staff suggests that the format in the DEIS for numbering figures and tables (which include as many as eight numbers, i.e., Table 3.1.16.5.2.2.6-2) be revised. It is obvious from the straightforward page numbering system used in the DEIS that simpler formats are possible and beneficial. The FPC staff suggests that a numbering format similar to that which is used for the pages also be used on the figures and tables in the FEIS.

Very truly yours,

Kenneth F. Plumb

Secretary

cc: Bruce P. Conrad (321)
Bureau of Land Management
Interior Building
Washington, D.C. 20240

RESPONSE

Comment #1

The Summary page has been changed to reflect this comment.

Comment #2

The studies of oil spill impacts discussed in Section 3.1.5.1.2 indicate a very remote chance of impacts to coastal areas between the Gulf of Alaska and Point Conception.

Comment #3

The estimated cost of the proposal has been added to Section 1.0 of the FES.

Comment #4

This has been corrected in Section 1.0, Introduction and General Project Description.

Comment #5

Section 1.0, Introduction and General Project Description, has been revised to reflect a more descriptive alignment of this section of the pipeline.

Comment #6

Section 1.0, under Significant Federal Actions, has been changed to reflect this comment.

Comments #7 and #8

This table has been changed for easier understanding.

Comment #9

This has been corrected in Section 1.1.1.1, under Sea Leg.

Comment #10

Table 1.1.1.1-4 was believed to be adequate in describing the general area involved in the proposal. Table 3.1.12.1-2 has been revised to accurately reflect the amount of land to be directly impacted.

Comment #11

A description of these bends has been added in Section 1.1.1.1, under Details of Arizona, New Mexico, and Texas Route.

Comment #12

Figure 1.1.1.2-4 has been replaced and is now consistent with the text in Section 1.2.2.1, under Storage Tanks.

Comment #13

Figure 1.1.2.1-1 has been changed to identify Dominguez Hills terminal as the inland terminal.

Comment #14

Section 1.2.2.1, under Dredge and Fill, has been revised to reflect this comment.

Comment #15

Information now contained in Section 1.2.2.1, under Dredge and Fill, of the FES is considered adequate for the analysis of impacts from dredging and filling activities which are directly related to the proposal.

Comment #16

It is believed that these tables are helpful to those who wish to assess the engineering and construction aspects of the proposal. No "typical" lists can be formulated because of differences in segment areas.

Comment #17

As discussed in Sections 1.2.3.3 and 1.2.3.4, access trails would be maintained in the right-of-way along most of the pipeline. Acreage to be utilized as maintenance roads is discussed in appropriate sections of Chapter 3. Maintenance or access roads outside of the proposed right-of-way would require additional permits and environmental analyses where public lands are involved.

Comment #18

"Gasline" has been changed to "gas pipeline."

Comment #19

BLM believes the table can be adequately utilized in the existing format.

Comment #20

Please refer to the "Air Quality Impact Assessment of Pipeline Abandonment and Conversion" (see Chapter 1, Table of Contents, for availability) and to its discussion in Section 3.1.6.1.2.

Comment #21

This was corrected in Section 1.2.3.1, under Abandonment and Conversion of Gas Pipelines.

Comment #22

Specific design plans have not been developed yet by the applicant.

Comment #23

Nondestructive tests of production welds are more fully described in Section 1.2.3.2, under Pipe Bending, Laying, and Welding. The percentage of welds to be so tested is presently unknown.

Comment #24

The figure .05 has been changed to .5 to reflect this comment.

Comment #25

This matter is now addressed in Section 1.2.3.2, under Main-Line Valves.

Comment #26

Because of a lack of precise information on the location of proposed power-line rights-of-way, these will require supplemental environmental analyses when formal applications from public utility companies are made.

Comment #27

See Comment 26, above.

Comment #28

All available information on this subject at the time of this writing was inserted in the text in Section 1.2.3.2, under Communication Systems. A mitigating measure is contained in Section 4.1.3 to require the best available leak detection system.

Comments #29, #30 and #31

A preliminary hydrostatic test plan has been developed and inserted in Section 1.2.3.2, under Actions Following Construction (Testing), and Appendix A1.2.3.2. Impacts related to this plan have been revised in the appropriate sections of Chapters 3 and 5.

Comment #32

Descriptions of various tanker operations have been added to Appendix A1.1.1.1.

Comment #33

BLM believes the text was adequate, and no change was made.

Comment #34

This item was corrected in the text in Section 1.3.1.3, under Federal Power Commission.

Comment #35

This information was added in Section 1.3.1.3, under Federal Power Commission.

Comment #36

There is no one wind rose for the Los Angeles Air Shed. Atmospheric stability varies with location and time. Minimal tables would not explicate; complete data would overwhelm. Wind roses and other data for the tanker route are in Attachment 2 of the FES.

Comment #37

Section 2.1.1.1, under Southern California Coastal Region, has been revised to quantify data on winter storms and severe winds. Data on Map 11 of Attachment 2 corroborate this.

Comment #38

The Tanker Traffic Study indicates minimal impact on tanker safety due to reduced visibility. See Attachment 2 for additional visibility data.

Comment #39

This paragraph has been deleted in the FES.

Comment #40

Refer to the response to Comment 36 above. The only impact identified as involving mixing heights is oxidant downwind. A detailed description of the meteorology used in the photochemical diffusion model can be found in the referenced Air Quality Study (Section 3.1.6) and in brief form in Appendix A3.1.6 of the FES.

Comment #41

Section 2.1.3.2.2, under Regional Tectonics and Structural Setting, has been revised to indicate the Palos Verdes fault as active.

Comment #42

Figure 2.1.3.2.1-1 has been corrected to reflect this comment.

Comment #43

Design displacements are not available for the faults crossed by this project except as reported in papers, such as Greensfelder, R.W. (1974). The applicant's seismic consultants, Holmes & Narver, Inc., are expecting only fault offset problems at the San Andreas fault crossing near Indio, California. A special pipe configuration is planned for this area. See Section 4.1.2 for related mitigating measures.

Comments #44 and #45

The text and Table 2.1.3.3.2-1 have been revised to correct these inconsistencies and to reflect these comments. Ground response evaluations related to anticipated seismic events have been studied by Holmes & Narver (1976). A statement was added in Section 2.1.3.3.1 that the Port of Long Beach will study the dynamic response evaluation of the port terminal area upon completion of the mechanical densification.

Comment #46

A detailed study of the liquefaction potential along the pipeline route is included in the reference: Holmes & Narver, 1976. A mitigating measure relating to liquefaction potential is included in Section 4.2.2.

Comment #47

This figure has been deleted in the FES.

Comment #48

The Newport-Inglewood fault has been changed to show capability of a 7.5 magnitude earthquake (Section 2.1.3.2.2, under Regional Tectonics and Structural Setting).

Comment #49

The description of Palos Verdes fault has been changed to indicate that it is an active fault. See Section 2.1.3.2.2, under Regional Tectonics and Structural Setting.

Comment #50

Section 2.1.5 was revised with much material removed to the Appendix.

Comment #51

Comment was considered but no text change was believed to be warranted.

Comment #52

Comment was noted but no text change was believed to be needed.

Comment #53

The text in Section 2.1.7.2 has been rewritten to reflect this comment.

Comment #54

These two sections were discussed separately under the major headings, Ocean (2.1.8.1.1) and Coastal, Bays, and Estuaries (2.1.8.1.2). Therefore, there is some unavoidable redundancy. No text change was made.

Comment #55

More specific information for the Prince William Sound area on commercial fish and crab harvests has been included in Section 2.1.8.1.

Comment #56

As much of this material was reworked as was possible.

Comment #57

Section 2.1.8.1.1 has been clarified regarding this comment.

Comment #58

The text was changed to reflect this comment.

Comment #59

Comment was considered, but no text changes were believed to be warranted.

Comment #60

Comment was considered, but no text changes were believed to be warranted.

Comment #61

Section 2.1.12.3, Santa Barbara County, has been revised to reflect this comment.

Comment #62

Section 2.1.12.3, Los Angeles-Rio Hondo Channels, has been revised to reflect this comment.

Comment #63

Comment was considered, but no text changes were believed to be warranted.

Comment #64

A text change made in Section 2.1.12.6, Los Angeles County, to reflect this change.

Comment #65

A text change made in Section 2.1.12.6, Los Angeles County, to reflect this change.

Comment #66

A text change made in Section 2.1.12.6, Los Angeles County, to reflect this change.

Comment #67

Comment was considered, but no text changes were believed to be warranted.

Comment #68

A text change was made in Section 2.1.12.6, Riverside County, to clarify this point.

Comment #69

Comment was considered, but no text changes were believed to be warranted.

Comment #70

A text change made in Section 2.1.13.2, under California.

Comment #71

Comment was considered; no text change required.

Comment #72

It is believed that the information presented in this section, including additional material added on vessel traffic, adequately addresses this issue.

Comment #73

The reference in Section 2.1.14.2 has been corrected, and a reference to a map of the Long Beach Port area, Figure 1.1.1.2-1, has been added to the text.

Comment #74

Reference to the cordon boundaries of the study area was deleted in Section 2.1.14.2. No further information was available on service of north-south surface streets.

Comment #75

Section 2.1.14.2, under Highways and under Railroads, has been revised to refer the reader to Table 1.2.3.2-1.

Comment #76

BLM believes that this section is necessary because one of the waterways discussed is navigable at the point crossed.

Comment #77

In many cases information is presented to show that there are no impacts. In large urbanized areas, aggregate data are better suited for presentation. No text changes are believed to be warranted.

Comment #78

This sentence in Section 2.1.16.3, under Housing, has been completed.

Comment #79

The text in Section 2.1.16.3, under Employment, has been clarified.

Comment #80

Comment was considered and no text change was believed to be warranted.

Comment #81

The scenarios presented in Section 2.1.16.5 are believed to adequately treat all realistic gas supply possibilities relevant to the proposal.

Comment #82

This reference to Figure 2.1.16.5-20 has been deleted in Section 2.1.16.5, under Natural Gas. BLM believes a new figure showing natural gas production in the United States is not needed.

Comment #83

BLM believes the discussion of energy supply/demand contained in Sections 2.1.16.5 and 3.1.16.5 adequately covers conditions and impacts related to conversion of the gas pipeline.

Comment #84

Section 2.1.16.5, under Natural Gas, was revised to reflect this comment.

Comment #85

The text in Section 2.1.16.5, under Natural Gas, has been clarified to reflect this comment.

Comment #86

Text changes were made in Section 3.1.2.2.1 reflecting this comment.

Comment #87

A text change was made in Section 3.1.2.2.1 reflecting this comment.

Comment #88

It has been determined that no maintenance dredging in the Colorado River will be necessary. This paragraph was deleted in Section 3.1.2.2.1.

Comment #89

Tsunami hazards are not considered to be potentially significant for this project. No text change was believed warranted.

Comment #90

Scour information was not available for most stream crossings. However, the potential impacts were reanalyzed in light of analogous data and professional experience, and no changes were believed warranted.

Comment #91

After reanalysis of the subject, no significant hazards from subsidence were identified in the karst areas in New Mexico and Texas. No text changes were believed warranted.

Comment #92

Information related to surface fault displacements is not available other than in references cited, such as Greensfelder, R.W. (1974). See Section 4.1.2 for related mitigating measures.

Comment #93

As abandonment of the gas facilities would have the greatest potential impact on vegetation and visual resources, the subject has been added to Sections 3.1.7.2.1 and 3.1.10.3 of the FES. A discussion of Guadalupe Pass has been added to Section 3.1.4.2.1 of the FES.

Comments #94 and #95

Loss of productivity refers to loss of perennial and annual vegetative cover resulting from construction activities. Loss of soil by wind during grading and excavation would be negligible in terms of reduced vegetative vigor or reproduction under natural conditions.

Comment #96

Various crossings are discussed in Section 1.2.3.2, under Special Construction. Specific measures for reinforcing the pipeline at locations where the span exceeds 40 feet in length have not been provided by the applicant.

Comment #97

Section 3.1.5.1.2, under Probability of an Oil Spill, has been corrected to reflect this comment.

Comment #98

Section 3.1.5.1.2, under Probability of an Oil Spill, has been revised to reflect this comment.

Comment #99

The source date for Coast Guard information was corrected in Table 3.1.5.1.2-1 of the FES.

Comment #100

This reference in Table 3.1.5.1.2-1 h s been corrected.

Comment #101

A comparison between data in Tables 3.1.5.1.2-1 and -2 cannot be made directly because Table 3.1.5.1.2-1 presents information about the accident rate of tankers per 1,000 trips while Table 3.1.5.1.2-2 refers to the SOHIO tanker fleet mix over a 10-year period. Note new material contained in Appendix A1.1.1.1-A on tanker traffic in the Valdez area.

Comment #102

Using the data in Table 3.1.5.1.2-2, 2.3 accidents per year is correct. Refer to Comment 101 above.

Comment #103

After further analysis, BLM believes the derivation for both tables to be consistent.

Comment #104

The data listed in Tables 3.1.5.1.2-6 and 3.1.5.1.2-7 has been reorganized for a clearer presentation of the probabilities and sizes of oil spills. A narrative description of the probabilities of a total loss of tanker oil is given in Section 3.1.5.1.2, under Summary. No changes in the basic methodology for arriving at probabilities were believed to be necessary.

Comment #105

Table 3.1.5.2.2-1 was prepared from national statistics and analyzed by MIT as indicated. As in all analyses involving averaging, the resulting figures usually cannot be applied to a specific site. The 22.5-barrel figure is an average figure while 100 barrels per hour is an upper limit.

Comment #106

The location of the Kofa Game Range relative to those sites listed in Table 3.1.5.2.2-2 can be determined by using available graphics.

Comment #107

An analysis for sulfur dioxide and particulate under observed severe meteorology with low wind speed has been added to Section 3.1.6.1.2 of the FES. There is no documentation to support extreme impacts over land resulting from fumigation.

Comment #108

Air quality impacts due to additional main-line fuel requirements have been added to Section 3.1.6.1.2.

Comment #109

The text has been changed to reflect this comment.

Comment #110

Section 3.1.7.2.1, under Arizona Upland Desert Biome and under Desert Grassland Biome, have been revised to reflect abandonment of Oracle and Bowie Natural Gas Compressor Stations.

Comment #111

Comment was considered, but no wildlife impacts were identified from these activities. No text changes were made.

Comment #112

The removal of the two compressor stations would involve little, if any, additional surface disturbance. Thus, impacts on cultural resources from this action are believed to be negligible.

Comment #113

Text changes have been made to reflect compressor station abandonment in Section 3.1.10.3, under Arizona.

Comment #114

Text changes have been made to reflect compressor station abandonment in Section 3.1.10.3, under Arizona.

Comment #115

Text was changed to reflect this comment.

Comment #116

Additional detail on noise impacts has been incorporated in Section 3.1.11.

Comment #117

Impacts of compressor station abandonment have been added in Section 3.1.7.2.1 of the FES.

Comment #118

Section 3.1.12.2, Operation and Maintenance, has been revised.

Comment #119

Section 3.1.12.1, under Texas, has been revised to reflect this comment.

Comment #120

This sentence in Section 3.1.12.1, under California, has been corrected.

Comment #121

This paragraph in Section 3.1.12.1, under California, has been revised.

Comment #122

This was clarified in Section 3.1.12.1, under California, in the FES.

Comment #123

This has been corrected in Section 3.1.12.1, under Arizona, in the FES.

Comment #124

This reference was deleted in Section 3.1.12.1, under Texas, of the FES.

Comment #125

This section in Section 3.1.12.2, under Operation and Maintenance, has been revised.

Comment 126

Section 3.1.14.2, under Parking, has been changed to specify that there are no adverse impacts.

Comment #127

This has been corrected in the FES.

Comment #128

Section 3.1.15.1 has been revised in line with the updated hydrostatic test water information presented in Section 1.2.3.2.

Comment #129

While this is mentioned briefly in Chapter 1, there are no current applications to build refineries along the pipeline route.

Comment #130

The text in Section 3.1.16.3, under Community Services, was changed by deleting "other than."

Comment #131

The text in Section 3.1.16.3.2, under Gila Pump Station, has been revised in the FES.

Comment #132

BLM believes the discussion of energy supply/demand contained in Sections 2.1.16.5 and 3.1.16.5 adequately covers conditions and impacts related to conversion of the gas pipeline.

Comment #133

Section 3.1.16.5 has been expanded to discuss the reduction of gas supply due to pipeline conversion. This topic is further discussed in the referenced study, "Air Quality Impact Assessment of Pipeline Abandonment and Conversion."

Comment #134

BLM believes the data presented in the referenced pages was the best available data at the time the study was conducted.

Comment #135

BLM believes the data listed in the referenced tables was the best available data at the time the study was prepared.

Comment #136

BLM believes that 447 million cf/day was the best available data at the time the study was prepared.

Comment #137

The best available data and assumptions were used at the time the study was prepared. The final disposition of Alaskan gas has not yet been resolved.

Comment #138

The assumptions, analysis methodologies, and information used in the DES were based upon the best available information at the time the study was conducted.

Comment #139

The text in Chapter 4 has been revised to reflect this comment.

Comment #140

Only the pipeline has been planned to be located within the Newport-Inglewood structural zone.

Comment #141

This mitigating measure (Section 4.1.3) has been changed to state that the best available technology will be utilized. The monitoring system has not yet been specified.

Comment #142

The text has been modified to reflect this comment.

Comment #143

Chapter 4, Mitigating Measures, has been substantially revised. See Section 4.2.2 for additional tanker requirements.

Comment #144

See the response to Comment 143. Section 4.2.2 now contains a committed requirement that only ships with fully segregated ballast will be permitted to use the Pier J facilities.

Comment #145

The Newport-Inglewood fault and the corresponding proposed mitigating measure has been changed to show capability of a 7.5 magnitude earthquake in Section 2.1.3.2.2, under Regional Tectonics and Structural Setting, and Section 4.3.2. Additional mitigation details were not believed necessary.

Comments #146, #147, #148 and #149

The proposed mitigating measure for on-site power has been deleted and the references to FPC corrected in the FES to reflect these comments.

Comment #150

The applicant has not determined the exact maximum distance between valves. Valve locations in critical areas have been addressed in Attachment 1, under sections of the route, and described in Chapter 1 in Section 1.2.3.2, under Main-Line Valves.

Comment #151

As discussed in Section 4.2.8, review and approval of mitigation plans by BLM, State Historical Preservation Officers, and the Advisory Council on Historic Preservation, as well as on-the-ground monitoring, will be required. It is believed that these actions will result in detailed mitigating measures for specific sites which will ensure maximum identification, recovery, and protection of cultural resources.

Comment #152

This comment was considered but the additional mitigating measure was not believed to be warranted.

Comment #153

A discussion of impacts from reduced availability of natural gas in California as a result of reduced capacity of the El Paso system has been added to Sections 3.1.6.1.2 and 3.1.16.5, and Chapters 5 and 7.

Comment #154

The mitigating measures discussed in Section 4.2.8 have been developed with the goal of maximizing the identification and recovery of cultural resources within the context of impending construction activities. It is recognized that limiting time for recovery efforts is, at least in part, a decision of the authorizing agency (BLM, in the case of public domain land rights-of-way) and that such a limitation would result in less effective recovery. Since the text identifies these impacts, no further changes were made.

Comment #155

See response to Comment 153 above.

Comment #156 and #157

The text has been clarified and additional data included in Chapter 8 to reflect this comment.

Comment #158

The text has been revised and corrected in Chapter 8 to reflect this comment.

Comment #159

The Fault Tree Diagrams are included in the FES in Appendix A1.0, Section 1H.2, under Design, Construction, and Operations features for preventing and minimizing oil spills.

Comment #160

The text has been corrected and expanded in the FES.

Comment #161

A footnote was added to Table A3.1.6.1-13 to reflect this comment.

Comment #162

Map 2.1.3-1 has been revised to reflect the proper delineation of the Palos Verdes fault.

Comment #163

Table and figure numbers are tied to the sections in which the reference is discussed. No numbers go beyond the numbering of those sections; i.e., a maximum of five numbers in Chapters 2 and 3, and four numbers in all other chapters.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20201

Project Manager
Bureau of Land Management
EIS Project Office
P.O. Box 660
Los Alamitos, California 90720

Dear Sir:

Thank you for the opportunity to review the Draft Environmental Impact Statement for the crude oil transportation system from Valdez, Alaska to Midland, Texas.

1 The working environment should be included in the human environment when performing an analysis of a proposed action in accordance with Section 102 of the National Environmental Policy Act of 1969. While mentioning potential worker exposures covered by the Occupational Safety and Health Administration regulations, this DEIS does not address the impact of the action on workers general safety and health.

2 Considerable attention is given to the historical landmarks along the route of construction. However, project employees should be made aware that unlisted and/or unknown archeological sites may be effected and workers should be advised of their responsibilities from the standpoint of legal requirements for preserving such sites.

3 The potential for pipe ruptures from earth tremors and fires present a risk to environments all along the pipeline route in Arizona, California, New Mexico and Texas. Therefore, this portion of the pipeline should be kept under continuous surveillance and a program for dealing with such emergencies should be implemented to immediately respond to any leaks that may occur.

Sincerely,

Charles Custard
Director
Office of Environmental Affairs

RESPONSE

Comment #1

The working environment is addressed in Section 3.1.17 on public safety which was added to the Final ES. Table 1.3.1.5-1 makes more complete reference to the Occupational Safety and Health Act of 1970. Besides safety, OSHA regulations are most pertinent to the noise environment category used in this Environmental Statement. The text in Section 3.1.11 (Noise) has been amplified to explain that noise impacts on workers are not discussed because they would be typical of those for major construction and well known by the appropriate regulatory agencies. The mitigating measure for noise suppression devices on construction equipment (Section 4.1.5) has been amplified to include all noise regulations.

Comment #2

A mitigating measure reflecting this comment has been added in Section 4.2.8.

Comment #3

A surveillance and maintenance program is discussed in Section 1.2.3.4. Oil spill contingency plans have been considered in the analysis of impacts for Chapter 5. The oil spill contingency plan is available as referenced in the Table of Contents for Chapter 1.

IN REPLY REFER TO:

Land Ope

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
Sacramento Area Office
2800 Cottage Way
Sacramento, California 95825

JAN 10 1977

Project Manager
Bureau of Land Management
Environmental Impact Statement
Project Office
P. O. Box 660
Los Alamitos, California 90720

Dear Sir:

The Bureau of Indian Affairs has reviewed the draft environmental statement on Crude Oil Transportation system: Valdez, Alaska, to Midland, Texas (DES 76/47 dated 11-22-76).

1 The study fails to address itself to the unique situation which the Indian people find themselves in today's society. The status of their land is unique, and as such, they are reluctant to permit its use for purposes which do not directly benefit the Tribe as a whole. They have a concept of land ownership that is foreign to the dominant society and do not feel that money, no matter how much, is adequate recompensation for losing the use of the land itself. They wish to retain their land for their own use as well as future generations.

This office would recommend that every effort be made in the final planning stage to insure that all Indian reservations are avoided in the final location of the pipeline transmission system.

It should also be pointed out that the cultural resource standards used to evaluate the sensitivity of Indian lands may not be the same as the Indian people would apply themselves.

While we have solicited but have not received any official word, we do understand that the Moronga Reservation does not want the oil pipeline to go across their reservation, and they will do everything in their power to keep it off of their reservation.

We also have solicited but have not received any official word, but we do understand that the Agua Caliente Reservation does want to negotiate a new lease.

There is a concern for potential damage that could occur in fishing areas and Indian trust land shorelines and feeling that all tankers on the proposed Valdez-Long Beach route should be of double-hull construction.

The above comments reflect only the views of the Bureau of Indian Affairs and not those of the Department of the Interior nor those of either Tribal Council.

William J. Finale
Area Director

RESPONSE

Comment #1

Comment was noted but an accurate, meaningful discussion of impacts reflecting this concern was believed to be impossible for this study. The Bureau of Land Management believes that the letter states the issues accurately and clearly, and probably needs no further elaboration. The concerns of the Indians will continue to be considered in the decisions by the Department of the Interior regarding the project.

IN REPLY REFER TO:

United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
ALBUQUERQUE AREA OFFICE
P.O. BOX 8327
ALBUQUERQUE, NEW MEXICO 87108

Environmental Quality 105

DEC 2 2 1976

Memorandum

To: Area Director, Sacremento Area Office
Attention: Environmental Quality Officer

From: Area Director

Subject: Review of Draft Environmental Statement on Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (DES 76/47, dated 11/22/76)

We have reviewed an executive summary of the subject statement and have no comments to make.

Area Director

United States Department of the Interior

BUREAU OF OUTDOOR RECREATION
WASHINGTON, D.C. 20240

IN REPLY REFER TO:

DES 76-47
BLM

JAN 10 1977

Memorandum

To: Project Manager, Bureau of Land Management

From: Director, Bureau of Outdoor Recreation

Subject: Review of Draft Environmental Impact Statement for the Crude Oil Distribution System: Valdez, Alaska to Midland, Texas

In accordance with your memorandum (undated), we have reviewed the document noted above.

Environmental Impacts
The statement indicates that the proposed pipeline corridor would pass near two parks and one recreation area and through one park that have been partially funded through the Land and Water Conservation Fund. The three recreation facilities that the line would pass near are:

1 - Whittier Narrows Recreation Area in Pico Rivera, California (see pp. 3-32B, 329)
2 - Franklin Mountains State Park (also known as Mt. Franklin Wilderness Park), El Paso, Texas (attachment 1, pg. B3)
3 - Hueco Tanks State Park, El Paso, Texas (attachment 1, pg. 83)

Section 6(f) of the Land and Water Conservation Fund Act of 1965 (P.L. 88-578) as amended states in part that, "No property acquired or developed with assistance under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonable equivalent usefulness land location."

1 Based on the above, if the proposed pipeline corridor is rerouted or if additional access and maintenance roads to the line are necessary so that they pass through any of the three parks noted above, then Section 6(f) would apply. Of course, 6(f) would equally apply to any other recreation facilities so funded along other parts of the pipeline corridor.

Mitigating Measures
2 The statement is made on page 4-6 of section 4.1.8 that rights-of-way will be utilized for nature trails and other activities. We agree that sections of the right-of-way should be developed for recreation purposes, however, the statement fails to discuss how this mitigation measure will be implemented. Plans for trail development and other recreation development along the right-of-way corridor should be coordinated with the appropriate local officials during the planning stages. The final statement should specify (1) which sections of the right-of-way have substantial potential for trail and/or other recreation development, (2) which local agencies have been contacted regarding the recreation potential of the right-of-way and what plans they have for utilizing the right-of-way, and (3) what assistance the applicant will provide in developing sections of the right-of-way corridor for recreation purposes.

for John Crutcher

RESPONSE

Comment #1

Sections 3.1.12.3, under Greater Los Angeles Urbanized Landscape, has been revised to show that Section 6(f) does not apply to the Whittier Narrows Recreation Area. The pipeline will not cross the other two cited areas and thus Section 6(f) does not apply.

Comment #2

The comment was considered, but it was believed that no text change was required.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Water Resources Division
310 First Avenue
Fairbanks, Alaska 99701

November 23, 1976

Charles R. Tulloss
Bureau of Land Management
P.O. Box 660
Los Alamitos, CA 90720

Dear Mr. Tulloss,

Thank you for providing the U.S. Geological Survey with the opportunity to verify information which was telephoned to Mr. Arthur Bass of Environmental Research and Technology regarding Columbia Glacier.

Overall, the draft statements about Columbia Glacier are clear and accurate. I have specific comments about unclear, misleading or incorrect statements. Because the pages are not numbered, I have referenced my comments to red numbers on xerox copies.

1 1. The iceberg risk to tankers is from Valdez Arm to perhaps Hinchinbrook entrance, not at Valdez. The potential for a significant increase in iceberg hazards is implicit in the data base; the depth below sea level of the glacier sole has been measured. Columbia Glacier may be entering a new and unstable phase, proof that it will become unstable is lacking. I would suggest the following wording:

> It should be noted, however, that the iceberg risk in Prince William Sound may prove to be significantly greater during future decades that that reflected in the history of iceberg hazards. Columbia Glacier has the potential to become unstable in the near future, and present data indicates that it may be entering a new and unstable phase at the present time.

2. Icebergs of that size were observed in Valdez Arm, period. The icebergs observed farther south were smaller, and the observations of these were by the U.S. Coast Guard, related to Austin Post verbally at least. I would suggest obtaining this information from Austin Post, USGS Tacoma, WA, or from the Coast Guard for the sake of accuracy.

3. I observed this current only once, October 8, 1975. Thus, it is stretching the point to say that the current is "typical". Ocean current

data may be available from the Institute of Marine Sciences, University of Alaska or from the U.S. Coast Guard. Or if it is not, that fact may be pertinent to the EIS.

4. Moraine is misspelled and it is not a generally understood lay term. The statement would be correct without it.

5. A. Post published this suggestion in 1975: Preliminary Hydrography and Historic Terminal Changes of Columbia Glacier, Alaska: U.S. Geol. Survey Atlas HA-559. I suggest referring to this published document here.

2 6. The recent observations which suggest growing instability are precision surveys of the glacier made in 1974 and 1976. These measurements document an actual change in the glacier over a two year period; this is not a matter for confirmation. What is critical to the problem is whether or not this trend will continue into the future. Please reword as follows:

> Precision surveys in 1974 and 1976 have documented a thinning and decreasing stability of Columbia Glacier. Iceberg risks in Prince William Sound will substantially increase in the future if this trend continues.

7. Suggest inserting the reference to A. Post at this point in the references.

If you have any further questions regarding Columbia Glacier, please contact Mark Meier or Austin Post in Tacoma (phone FTS 390-6502) or me here in Fairbanks (phone 907-452-1951 ext. 176).

A copy of the draft report has been forwarded to Meier and Post. They may have additional comments.

Sincerely,

Larry Mayo
Hydrologist

Enclosure
cc: Meier and Post, Tacoma USGS
District Chief, WRD, Anchorage

RESPONSE

Comment #1

Additional information reflecting this comment about Columbia Glacier has been included in Section 3.1.5.1.2 and in Appendix A1.1.1.1-A, Tanker Traffic Study.

Comment #2

Iceberg hazards have been included in Appendix A1.1.1.1-A, Tanker Traffic Study, and in Section 3.1.5.1.2 of the FES.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Water Resources Division
Project Office - Glaciology
1201 Pacific Avenue, Suite 850
Tacoma, Washington 98402

November 30, 1976

Charles R. Tullosss
Bureau of Land Management
P.O. Box 660
Los Alamitos, CA 90720

Dear Mr. Tolloss:

Mr. L. R. Mayo, U. S. Geological Survey, Fairbanks, Alaska, has sent us a copy of a portion of the report "SOHIO Curde Oil Transportation System Tanker Traffic Study" and his letter to you dated November 23.

1 We recommend that the additions and corrections noted by Mr. Mayo be inserted in the document which should then quite accurately assess the iceberg hazard situation.

I am enclosing copies of several "iceberg reporting forms" which were filled out by officers of the Alaska ferry MV E. L. Bartlett and the tourist vessel "Glacier Queen" last summer, which shows iceberg conditions in Valdez Arm on several occasions. These observations further document the presence of icebergs in the projected tanker lanes which resulted from abnormally heavy calving of ice from Columbia Glacier this year.

Also enclosed is a copy of HA-559 "Preliminary Hydrography and Historic Terminal Changes of Columbia Glacier, Alaska." by Austin Post.

Sincerely,

Austin Post
Hydrologist

Encs.

RESPONSE

Comment #1

Additional information on iceberg hazards has been included in Appendix A1.1.1.1-A, Tanker Traffic Study.

United States Department of the Interior
BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

IN REPLY REFER TO: 150
120.1

FEB 4 1977

Memorandum

To: Project Manager, Bureau of Land Management, Los Alamitos, California

From: Commissioner of Reclamation

Subject: Review of Draft Environmental Statement for the Crude Oil Transportatioo System from Valdez, Alaska, to Midland, Texas, as Proposed by SOHIO Transportation Company (DES 76-47)

The Bureau of Reclamation has reviewed the Executive Summary and full subject document. The following comments are offered for your consideration in further development of the statement.

The proposal affects the Bureau of Reclamation where the existing pipeline corridor crosses the proposed alinement of the Salt-Gila Aqueduct, Central Arizona Project, near Picacho Reservoir in Pinal County, Arizona, and project-related lands along the Rio Grande and Pecos Rivers in New Mexico. Maintenance and agricultural activities occur on these lands in New Mexico. Nevertheless, the mitigative and protective measures proposed in the statement appear adequate to prevent unacceptable, adverse environmental impacts in these areas.

Further specific comments are intended to assist in clarification of the statement.

Executive Summary

The Executive Summary tends to emphasize the west coast and Colorado River areas. The summary should note that other areas affected by the proposed action are receiving the same environmental consideration.

The Executive Summary lists 237 miles of new 42-inch pipeline and 789 miles of existing 30-inch pipeline which would be integrated into a single unit line. The summary could note that a single 30-inch line is adequate for the present 500,000 barrels per day proposed. However, the 42-inch line is used for the new line in order to provide the capability to double the capacity at a later date by integrating with a second existing 30-inch line.

Page IV-10, paragraph 2--The last sentence states that SOHIO must eliminate all emissions from project-related sources plus eliminating an equal additional amount of emissions that are the result of unrelated systems. It would appear unreasonable for SOHIO to eliminate all project-related emissions. Therefore, it seems the intent should be for SOHIO to eliminate all project-related emissions it reasonably can, then to eliminate emissions from nonrelated sources in an amount so the total tradeoff will result in no net increase of emissions in the area.

Page VIII-2--The first sentence can be interpreted in different ways. A clear statement is needed.

Page VIII-3--The summary should indicate if effects from "delayed action" are less, the same, or greater when compared to the proposed action.

Draft Statement

The length of the draft statement is increased by seemingly unnecessary repetition of general facts. For instance, there are item by item repetitions of the statement that impacts depend upon size, strength, duration, location, and zone of impact as well as physical characteristics and meteorology of the area. This could be emphasized in an opening statement applicable to all following discussion. Other items that are applicable to all similar situations could likewise be handled by general opening statements.

There is an intermingling of discussions of areas where adequate facilities now exist, areas where facilities must be altered or improved, and areas where completely new facilities are required. The discussions, including those on impacts, would have more meaning if there were clearer definitions of the type of area in the immediate discussion.

Like the Executive Summary, the statement could note that environmental considerations emphasized for specific locations are also kept in mind for all applicable locations.

1 Page 1-1, paragraph 2--There should be a reference concerning cumulative effects from the additional impact from handling the 500,000 barrels per day of oil at Valdez that is not considered in the SOHIO proposal.

2 Page 1-40--Pages 3-19 and 5-9 discuss impact of work at the Pecos River crossing. It is not stated why work is necessary at an existing crossing. If such work is necessary, the description of the work might properly be included on page 1-40.

2

3 Page 2-226--It is correct that the Midland area drains into the Gulf of Mexico. However, the Pecos enters the Rio Grande and the Rio Grande also enters the Gulf of Mexico.

4 Page 2-83, Table 2.1.5.4-1 and following water quality tables--The readings given are maximum allowable readings. This should be noted to prevent any confusion as to whether the readings are maximums or minimums.

5 Page 2-945--Table 2.1.16.4-3 does not support the conclusion that the black employment rate for Midland was 50 percent higher than that of total minorities. The table shows the statement is true for El Paso.

6 Pages 3-8, 3-9, and part of 3-10--This discourse is informative but does not constitute impact. There are also other places where discussion does not discuss impacts.

7 Page 3-13, first sentence--It appears that the three words, "the reduction in," following the comma should be deleted.

8 Page 3-45--The discourse on dredging lists factors but not impacts.

Pages 3-47, 3-48, and 3-49--Table 3.1.5.1.1-1 gives data for existing conditions rather than impact.

9 Page 3-102, second paragraph, line 6--The sentence appears to have a portion omitted.

10 Page 4-6 (4.1.8-3)--A notation could be made that certain compressor and pump stations now in use for natural gas could not be used for oil. They would be removed.

11 Page 4-9--The main paragraph should be reworded so the meaning is clearly expressed.

12 Page 4-24--The figure lacks clarity of expression.

13 Page 4-25--The expression of anticipated effectiveness could be stated something like the following: "Disruption is minimized (or eliminated) for 100 percent of agricultural and wildlife activity in this area."

14 Page 4-26--Mitigation by landscaping and painting would seem to be generally applicable.

15 Page 4-36--The commitment to replace fences would seem to be a general obligation applicable to all similar situations.

16 In some cases, the mitigation by relocation or alternate source of power appears to be selection of an improved or more desirable plan. This approach is not mitigation but selection.

17 Page 4-59(2)--The statement should be worded to apply to antiquities discovered after the inventory is completed.

18 Page 4-61--If agricultural lands are affected, there should be mitigation features.

Page 5-1--We question the premise that failure to carry out the proposed reasonable mitigation would mean a classification as an unavoidable impact.

19 Page 6-13 (6.2.2)--The first paragraph does not seem necessary for this section.

20 Page 8-12--The information given is accurate. However, the "no action" alternative should face the proposition that no action be taken to transport oil from Valdez and particularly from Valdez to the continental United States. Rationaliration that some action will be taken is not the issue here.

21 A-115--This table shows the crossing of the Pecos River to be in Texas. The maps show the crossing is in New Mexico. The table, map, and discussions should be coordinated.

22 Attachment 1, Maps--The series of maps, 2.1.5-1 through 2.1.5-12, are useful and informative. However, they give nothing on ground water and are hard to follow on surface water. A different map title would seem appropriate.

23 Chapters 2 and 3 need a more detailed index.

G. Stamm

cc: Director, Bureau of Land Management

RESPONSE

Comment #1

Analysis of this aspect at Port Valdez is beyond the scope of this ES.

Comment #2

Table 1.2.3.2-2 indicates that the pipeline will be buried under the Pecos River. The details are delineated in Section 1.2.3.2, under Water Crossings, in a statement that applies to all river crossings.

Comment #3

Comment was noted but no change was believed to be warranted.

Comment #4

Table 2.1.5.4-1 has been moved to Appendix Table A2.1.5.4-1 and has been clarified to state that the readings given are maximum allowable readings.

Comment #5

This statement on black unemployment rates was true for El Paso not Midland. Section 2.1.16 has been changed.

Comment #6

Comment was noted but no text change was believed to be necessary.

Comment #7

Section 3.1.2.1, under Year 2000, has been revised.

Comment #8

Because quantitative impact analysis was not possible, the qualitative analysis in Section 3.1.5.1.1 was presented to provide some indication of possible impacts. Table 3.1.5.1.1-1 has been incorporated into Section 2.1.4.1.

Comment #9

This statement has been deleted in the FES.

Comment #10

A text change has been made reflecting this comment in Section 4.1.8.

Comment #11

Section 4.2.1 was changed to reflect this comment.

Comment #12

The figure has been deleted from the FES because of a change in proposed mitigation.

Comment #13

A text change has been made in Section 4.2.3 reflecting this comment.

Comment #14 and #15

Mitigating measures have been made site specific wherever possible, as generally applicable mitigation cannot be uniformly enforced on private lands without state or local governmental agency commitments.

Comment #16

Mitigation by relocation or alternate power is the best means of minimizing adverse visual and land use impacts -- the SOHIO proposal to ship crude oil to Midland via use of an abandoned natural gas line is not changed; hence, these power-line relocations are not alternatives.

Comment #17

The text has been changed to reflect this comment.

Comment #18

Section 4.1.6 reflects this comment.

Comment #19

The comment was considered, but the paragraph was believed to be necessary.

Comment #20

The No-Action alternative was substantially revised in the FES. However, no action or delayed action is primarily discussed in terms of the proposed Long Beach terminal and pipeline to Midland, Texas, not in terms of nonproduction of North Slope crude oil.

Comment #21

Appendix Table A2.1.5.2-2 has been changed in the FES.

Comment #22

The Changes and Additions to Attachment 1 refer the reader to Appendix A2.1.5.2-14 for records of selected wells noted on Maps 2.1.5-1 through 2.1.5-12.

Comment #23

A more detailed index has been developed and added to the document.

United States Department of the Interior

NATIONAL PARK SERVICE
WASHINGTON, D.C. 20240

IN REPLY REFER TO:

L7619-460

1977

Memorandum

To: Director, Bureau of Land Management

Through: Assistant Secretary for Fish and Wildlife and Parks

From: Acting Associate Director

Subject: Review of Crude Oil Transportation System from Valdez, Alaska to Midland, Texas (DES 76-47)

We have reviewed the draft environmental statement and offer the following comments for your consideration.

GENERAL COMMENTS

In our view the approach used to protect the cultural environment for this project reflects sound professional planning judgment. Our comments are intended to build upon the approach selected.

1 Background data on archeological resources appears to be adequate, but no field survey has been conducted. As a result, the actual impacts of the project on archeological resources cannot be clearly identified. A full survey should be completed, and compliance with the procedures set forth at 36 CFR Part 800 documented, prior to construction. Background data on historic resources, including both historic and archeological resources and those of a non-archeological nature, are of much poorer quality than those on implicitly prehistoric archeological resources. Surveys for compliance with historic preservation statutes (notably Section 106, National Historic Preservation Act, and Executive Order 11593) should be interdisciplinary, providing data on all types of historic properties. Consultation with pertinent State Historic Preservation Officers should be documented, and compliance with 36 CFR Part 800 clearly indicated. If full interdisciplinary surveys are not possible prior to completion of the FEIS, consultation with the State Historic Preservation Officers and the Advisory Council on Historic Preservation, culminating in a programmatic agreement concerning later surveys and mitigation measures, should be documented.

2

SPECIFIC COMMENTS

2 Page 4-6: Mitigation measure 4.1.8.5 merely states that archaeological surveys will be done. These surveys should be interdisciplinary, insure the location of all types of historic properties, and should lead to the development and implementation of plans for avoidance and/or data recovery, in consultation with the State Historic Preservation Officers and the Advisory Council on Historic Preservation. To merely conduct a survey is not a mitigation device.

3 Pages 4-55 - 4-60: In addition to the measures discussed for mitigating direct impacts, provision should be made for avoidance or mitigation of indirect impacts such as vandalism by construction workers. The discussion at 4.2.8 deals almost solely with archeological (and paleontological) resources. More attention to non-archeological historic properties appears to be necessary.

4 The discussion concerning impacts on cultural resources at 3.1.9 should make clear that the full magnitude of these impacts is not presently known and that a mitigation program to minimize known and unknown impacts is part of the proposal.

5 The statement on p. 3-274 that "recovery negates loss of the data base" is not entirely correct. Data recovery may mitigate loss, but seldom totally negates it. Some benefits do accrue from data recovery, but they are minor compared to the adversities arising from resource loss.

6 Page 4-57: In the third full paragraph measures to protect and preserve cultural resources are discussed. We suggest that the discussion be changed to make clear that whenever possible cultural resources will be avoided. When avoidance is impossible, measures to mitigate the adverse impacts of disturbance will be implemented. These mitigating measures will include scientific study, salvage and other measures that may be developed through consultation pursuant to 36 CFR 800.

7 Page 4-58: In the first paragraph the discussion of the construction method that would avoid the disturbance of surface cultural resource remains should be expanded to reflect consideration of subsurface remains. The technique discussed should result in a reduction of adverse impact and may be even more effective with the use of knowledge about subsurface remains.

We request that a copy of the report detailing the results and recommendations of the archeological survey as discussed on page 4-57 be made available to the Western Archeological Center, National Park Service, P. O. Box 49008, Tucson, Arizona 85717, so that a more comprehensive review of the final statement will be possible.

3

8 In attachment 1, page 76, the southern colored area designated as San Bernardino National Park should be changed to San Bernardino National Forest.

Robert Stanton

RESPONSE

Comment #1

As discussed in Section 4.2.8, following the completion of cultural resource surveys the identified resources must be evaluated in terms of the National Register of Historic Places criteria as set forth in 36 CFR 800. Following this evaluation, consultation with each of the affected State Historic Preservation Officers must be initiated. Based on the consultation, mitigation plans must be developed for review by the Advisory Council on Historic Preservation.

Comment #2

BLM believes that the added reference to Section 4.2.8 provides clarification on this comment. BLM agrees that inventory is not mitigation and points out that it is not proposed as such.

Comment #3

An additional mitigating measure regarding construction workers has been added to Section 4.2.8 to reflect this comment. BLM believes that the term "cultural resources" refers to all values (recent historic, early historic, or prehistoric) and should be viewed in that sense.

Comment #4

This comment is reflected in the discussion of unavoidable adverse impacts (after mitigating measures have been applied) in Section 5.9.

Comment #5

This statement has been revised to reflect the comment.

Comment #6

The text has been changed to state that avoidance is the preferred mitigation.

Comment #7

Obviously in any situation where subsurface remains may reasonably be expected to occur, this technique would not be considered. In the context of the discussion, this course of action will be considered only in the instance of clearly recognized surface roads or trails.

Comment #8

Error was noted on the Attachment 1 change sheet.

OFFICE OF THE DIRECTOR

United States Department of the Interior

BUREAU OF MINES
2401 E STREET, NW
WASHINGTON, D.C. 20241

January 10, 1977

Memorandum

To: Project Manager, Bureau of Land Management, Los Alamitos, California

Through: Deputy Assistant Secretary--Energy and Minerals JAN 18

From: Director, Bureau of Mines

Subject: Draft environmental statement for crude oil transportation system from Valdez, Alaska, to Midland, Texas

This draft environmental statement provides a thorough study of the proposed Standard Oil Company of Ohio (SOHIO) transportation system to move large quantities of crude oil by tanker from Alaska to the West Coast and then through a pipeline to Midland, Texas, where connection will be made with existing pipelines that serve inland refineries.

It is anticipated that a major surplus of crude oil, on the order of 500,000 bbls/day, could develop on the West Coast when Alaska North Slope production commences in 1978 and that this surplus could grow to as much as 900,000 bbls/day by 1982. The SOHIO proposal would move this oil to refineries in Texas through conversion of an existing natural gas pipeline and then to midwestern and eastern markets. Future conversion of other existing natural gas pipelines paralleling the present line could increase the capacity of this system to 1.2 million bbls/day. However, the SOHIO pipeline project could not be finished before 1979, leaving a period of time in which an alternative means of getting Alaskan oil to markets still would be required.

The study identifies mineral resources and operations in the area of the pipeline to be primarily sand and gravel, but including oil and gas in the Long Beach area and eastern New Mexico and western Texas. Mention is made of the porphyry copper belt traversed by the existing pipeline (both the Sacaton and San Manuel mines are identified as being within several miles of the pipeline), although no elaboration is made of the significance of this area as a mineral producer. Likewise, the potash deposits of southeastern New Mexico are identified, but the importance of the area as a national supplier of this mineral is not discussed. The presence of gold, lead, zinc, uranium, sulfur, and other oil and gas resources in areas adjacent to the pipeline is noted. The study

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sees no potential adverse impacts on mineral resources from the proposed project. It should be kept in mind that the pipeline proposed for most of this route is already in place as a natural gas pipeline. New construction would involve mainly additional pumping stations. Thus, additional land disturbance would not be great.

One helpful feature of this study is a listing of special features within the proposed pipeline corridor, including two dozen or more mines, clay pits, gravel pits, and quarries. The impact of potential oil spills on sand and gravel pits that might be contaminated is briefly discussed. Five pits whose proximity to the pipeline might make them vulnerable to such contamination are listed.

1 We suggest that the crude oil storage tanks at Midland, Texas, described on page 1-38, be fitted with vented weather roofs constructed above the floating roofs. The additional cover would protect the rubber roof seals from the damaging dust storms that are prevalent in the area.

2 One paragraph on page 2-829 raises some questions as to its accuracy and intent. Paragraph two on that page states, "Previous use of National Resource lands for indiscriminate mining claim locations have left a hazard to recreational users in terms of open shafts or small pits. These have caused serious injury and accidental deaths." Mining claim locations are not "indiscriminate" in that, first, valid mineral claims can only be made in accordance with a specific legal procedure and, secondly, mining law requires discovery of a valuable mineral deposit prior to location of the claim. Furthermore, while the hazard to recreationists may be real, the implication that exploration for minerals is an unessential nuisance is incorrect. This paragraph does not appear to be essential and could be eliminated with no loss to the continuity and meaning of the discussion. All public lands not specifically withdrawn are open to mineral exploration and location or lease. Incidentally, the meaning of the term "National Resource lands" is not clear in the context used. If the term refers to BLM-managed lands, P.L. 94-579 has reversed the use of this term by reestablishing the term "public domain."

3 On pages 3-391 to 3-396 the draft environmental statement discusses SOHIO's proposal to convert part of the El Paso natural gas pipeline system into a crude oil transport facility. A few points in this part of the statement are not clear and some statements are subject to correction.

For example, table 3.1.16.5-4 considers capacity of both the El Paso and Transwestern natural gas pipeline systems presently serving the Permian Basin-Southern California route. However, tables 3.1.16.5-5 and 3.1.16.5-6, used to illustrate load factors over this route through 1985, exclude capacity and projected send-out quantities of the Transwestern pipeline system; the difference between capacity and send-out quantities of the Transwestern facilities may have a significant impact on the projected load factors.

3

4 The statement fails to indicate the assumptions on which the "Likely" and "High-Volume" send-out quantities from Permian Basin sources listed on tables 3.1.16.5-5 and 3.1.16.5-6, respectively, are based.

5 In addition tables 3.1.16.5-5 and 3.1.16.5-6 incorrectly show the El Paso pipeline system capacity without the 30" line proposed for conversion at 2,689.3 MMcf/d in 1976. This capacity should be shown as 2,020.6 MMcf/d, and the load factor for the same year should be modified either in conjunction with the corrected capacity or footnoted to the effect that 1976 includes the 30" line.

6 A factor which requires clarification relates to the projected movement of quantities of Alaskan gas allocated to California via displacement over the Permian Basin-Southern California route. This situation would occur only if California's share of Alaskan gas were piped to midwestern and eastern markets.

However, the Alaska Natural Gas Transportation Act of 1976 (S.3521) requires that any transportation system "assure direct pipeline delivery of Alaska natural gas contemporaneously to points both east and west of the Rocky Mountains in the lower continental United States." Therefore, use of the Permian Basin-Southern California route as a facility for supplying the California share of Alaskan gas via displacement appears unlikely. Therefore, the 447, shown in table 3.1.16.5-6, should be deleted.

Overall, this statement is well done. Its identification of mineral resources and the potential impact of the proposed action on these resources appears complete and accurate. The discussion of energy and supply and demand is very good. The only general criticism of treatment

7 of the mineral resource environment of this proposal is that it does not identify the Arizona copper belt as one of the unique mineral resources of the world and a major element in the economy of Arizona and, likewise, the significance of the New Mexico potash deposits. The study does, however, note the importance of the Wilmington oilfield in California and the dominance of mining employment in a number of Texas counties through which the pipeline passes. We agree with the conclusion that the proposed pipeline would have minimal impact on present and future development of mineral resources along its right-of-way.

Thomas V. Falkie
Director

RESPONSE

Comment #1

New technology provides various methods for protecting the seals and for reducing emissions that are induced by wind and go past seals. A fixed roof would increase the danger of development of an explosive mixture in the space between roofs. The best available control technology would be determined by the Environmental Protection Agency.

Comment #2

Section 2.1.12.5, Pipeline Route, has been revised to reflect these comments on mining claims and public domain.

Comment #3

This information is available in: Final Report, BLM-SOHIO Project; Volume 8, Energy Supply/Demand, which is available as referenced in the Table of Contents for Chapter 1.

Comment #4

The delineation is based upon differing predictions of annual available sendout quantities from the Permian Basin. These assumptions are further discussed in the supplemental Energy Supply/Demand report. This is available as referenced in the Table of Contents for Chapter 1.

Comment #5

The data obtained from El Paso Natural Gas Company supports the present text.

Comment #6

Based upon a review of this data by El Paso Natural Gas Company and other sources, this table is assumed to be based upon the best available data.

Comment #7

The mineral resources of the Arizona copper belt and the New Mexico potash deposits are not expected to be impacted by this project.

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

OFFICE OF THE DIRECTOR

In Reply Refer To:
EGS-Mail Stop 760

JAN 4 1977

Memorandum

To: Project Manager, EIS Project Office, Bureau of Land Management
Los Alamitos, California

Through: Deputy Assistant Secretary--Energy and Minerals James R. Gill 5 1977

From: Acting Director, Geological Survey

Subject: Review of draft environmental statement for crude oil transportation system from Valdez, Alaska, to Midland, Texas

We have reviewed the subject draft environmental statement as requested in a letter from the State Director, Bureau of Land Management.

Environmental impacts related to geologic conditions have been exhaustively treated in the draft environmental statement. The document is exemplary as an analysis of impacts of oil pipeline construction, and appears outstanding in at least the following respects: (1) excellent map folio, including delineation of such geologic hazards as slides and rockfalls, liquefaction, subsidence, water and wind erosion, expansive soils, and active sand dunes; (2) comprehensive treatment of surficial deposits or soils throughout the report, including maps of their engineering characteristics, hazard potential, subsurface conditions and slope, and good analyses of related impacts (for example, p. 3-30 to 3-45); (3) extensive analyses of seismic hazards (for example, p. 3-25 to 3-30); (4) extensive documentation of sources (for example, 56 pages of references for ch. 2, alone, p. 2-1070 to 2-1125); (5) outstanding section on mitigating measures, including numerous proposed relocations of facilities (p. 4-1 to 4-61); and (6) outstanding section on consultation and coordination (p. 9-1 to 9-24).

1 Discussion of clearing and grading of pipeline right-of-way (p. 1-50, par. 6) should include provisions for revegetation to minimize erosion that may result from either severe thunder-shower runoff or wind action.

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2

2 A cathodic protection system for ground water resources is to be used (p. 1-75, 1-126, A-4, A-5, A-15). The environmental statement should describe the principal features of this system; in particular, it should state whether deep vertical cathode wells will be used or shallow vertical or horizontal cathodes. If deep well cathodes are to be used, the statement should address the protection of aquifers against movement of pollutants down the cathode wells, which are usually packed with permeable materials.

3 No explanation was noted in the text for the three "drill sites" on Pier J delineated on figure 1.1.1.2-2.

4 The water depth at the proposed terminal site in San Pedro Bay is given as approximately 48-feet MLLW on page 2-42 (par. 1), but was previously given as 42 feet MLLW on page 1-29 (last par.). It is probable that these depths apply to different parts of the area, but it would be helpful to clarify this in the text.

5 A heading such as "Los Angeles Basin" appears to have been omitted on page 2-42 (before last par.).

6 Confusion arises from the fact that the proposed site of the tank farm at Long Beach is described as being on Pier J throughout chapters 1 to 3, in spite of the acknowledged hazard of earthquake-induced liquefaction of the underlying hydraulic fill (for example, p. 2-85). It would be advisable to mention earlier that mitigation of this hazard is evidently proposed; the proposed relocation of the six large storage tanks inland was first noted on pages 4-14 to 4-17.

7 It would be helpful to include in the section entitled "Background in brief" (p. 1-4 to 1-26) the date of the application by SOHIO Transportation Company.

8 In the Summary of Environmental Impacts (p. iii, par. 3) it might be appropriate to mention beneficial impacts associated with supplying oil to the ultimate market area, including the northeastern United States. The same section fails to mention directly any dredging-induced impacts, although these are evaluated in considerable detail in chapter 3 (for example, p. 3-5, 3-30, 3-45 to 3-52).

9 Concern for pipeline integrity is likely to arise from the discussion of the landslide hazard in the Puente Hills of southern California, at least through chapter 3. It might be advisable to mention in the discussion on page 3-22 that mitigation of this potential hazard is proposed by ensuring that landslide-prone material will not be crossed by the pipeline alignment in that area (p. 4-22, par. 2).

3

10 No potential hazards to storage facilities at Long Beach are mentioned in the Summary of Environmental Impacts (p. iii, par. 3), although reference is made to "the storage tanks at the Port." Later it is stated that "the potential for liquefaction-induced ground failure and consequent failure of the pipeline or storage facilities in the urban Long Beach Port and Los Angeles Basin areas constitutes one of the most serious potential hazards to the pipeline" (p. 3-29 to 3-30). This and other similar apparent omissions or inconsistencies might be clarified by explaining at the outset the meaning of what is "proposed" in chapter 1 as opposed to chapter 4, and the manner in which mitigating measures have been treated in the environmental statement.

11 The summary of mitigation measures (p. 4-4) should include those used for ground-water impacts; many of the planned methods of mitigation of ground-water impacts are mentioned individually at scattered points in the text.

Larry W. Cordier
Acting Director

RESPONSE

Comment #1

Section 4.1.6 has been altered to reflect this comment.

Comment #2

Section 1.2.3.2 has been revised to reflect this comment.

Comment #3

Figure 1.1.1.2-2 was changed for the FES.

Comment #4

Sections 1.2.2 and 2.1.3 have been revised to reflect this comment.

Comment #5

Section 2.1.3.1.2 has been revised.

Comment #6

Section 2.1.3.3.1, Liquefaction, has been revised.

Comment #7

Section 1.1 has been revised to reflect this comment.

Comment #8

Beneficial marketing aspects were not considered within this environmental analysis. Impacts from port construction have been added to the summary page which appears at the beginning of the first volume of the ES.

Comment #9

Section 3.1.3.3.2, Slope Instability, has been revised.

Comment #10

Chapter 4 has been substantially revised and expanded to clarify this comment. After mitigating measures have been applied, the hazards to storage facilities at Long Beach are not considered a major impact of the project.

Comment #11

The section referred to is not a summary of mitigating measures, but rather those mitigating measures that the applicant has committed to in his original proposal. That proposal did not define any mitigating measures for groundwater impacts.

United States Department of the Interior

ADDRESS ONLY THE DIRECTOR, FISH AND WILDLIFE SERVICE

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

In Reply Refer To:
FWS/EC

January 26, 1977

MEMORANDUM

TO: SOHIO EIS Project Manager, Bureau of Land Management, EIS Project Office, Los Alamitos, California

FROM: Chief, Branch of Environmental Coordination, U.S. Fish and Wildlife Service

SUBJECT: DEIS SOHIO Crude Oil Transportation System

We are glad to have had the opportunity to review this draft EIS. Our review has been made easier by your close cooperation with our field people on its development. You are to be complimented on your thorough examination of the transmission corridor and the impacts of construction. The executive summary was a valuable aid in the review, although more frequent references would have been helpful.

In general, we find that the statement adequately addresses the potential impacts of this project on fish and wildlife resources. However, we are concerned by the rationale displayed in the report that the losses of habitat resulting from new pipeline construction are insignificant when compared to the amount of such habitat available, or that the losses of small mammals, reptiles, invertebrates, etc. are short-term and insignificant since the number of individuals lost would be far less than one percent of the total population. Such rationale has placed many endangered or threatened species in the position they are in today.

Our major concerns, discussed below, are with (1) the lack of discussion of the impacts at Port Valdez, (2) impacts on aquatic life in the Long Beach area, (3) impacts of the Colorado River crossing and the Kofa Game Range, (4) the lack of commitment on many of the mitigation proposals, (5) the inadequate discussion of alternative pipeline routes, and (6) endangered species section needs to be supplemented.

1 1. Impacts of the transportation system out of Port Valdez on fish and wildlife in the vicinity have not been analyzed in detail nor have mitigation proposals been developed. The EIS of the trans-Alaska pipeline did consider those details with its scope and now you say this

- 2 -

1 is beyond the scope of the present statement. This subject should be fully covered before the final statement is released on this project.

2 2. Mitigation measures are needed for project-endangered losses of recreational fishing access on Pier J and loss of soft-bottom habitat.

3 Pages 3-44 fail to deal with the impacts of spoil disposal. Significant impacts on fishery resources would be expected to occur at either a diked fill in the Los Angeles--Long Beach Harbor waters or at the EPA approved LA-2 disposal site. These should be discussed.

4 Pages 4-13, Measure 8. -- Removal of contaminated dredged materials to an EPA approved dump site will not preclude "possible contamination of benthic or aquatic organism habitat." The most probable disposal site is LA-2, a site to which both the Fish and Wildlife Service and California Department of Fish and Game have objected because of potential adverse impacts on adjacent fishery resources.

5 Pages 5-19, para. 4, Adult Fish. -- This paragraph fails to point out that the SOHIO project is expected to cause a change in species dominant in the immediate area from bottom fishes to fish species preferring rocky substrate. This change is part of a general trend toward reduction of soft-bottom habitat as the harbor is filled in for commercial development. Each additional fill reduces further the amount of soft-bottom habitat. If the Port of Long Beach carries out its 1975 general plan, soft-bottom habitat will become a truly scarce commodity in the harbor. Because of this trend, the exchange of riprap for soft-bottom habitat cannot be considered an even trade. Measures for mitigating the loss of soft-bottom habitat should be included in Chapter 4 of this EIS and the subject should be discussed in more detail in Chapter 3.

6 One of the areas of highest benthic diversity is in the area labeled (summary pages 1-15) as "future land fill" between the berthing area and Pier J with its associated recreational fishing facilities. Such communities are a basic part of the food web supporting the fish population. Preservation and development and/or other areas in the harbor area could help compensate for losses in the area to be dredged.

7 The pilings supporting the proposed pipe and road trestle and the proposed inner breakwater will provide new habitat for several fish species commonly caught in the area. We strongly recommend that facilities and arrangements for public use of the trestle be provided. This should more than compensate for project engendered losses to recreational fishing in the harbor area.

3. We continue to be concerned about the Colorado River crossing. The planned location of the Colorado River crossing which would transect Goose Flats, a backwater that was developed by the U. S. Bureau of Reclamation as partial mitigation for adverse impacts of river channelization in this area. We will look at the crossing plans closely before making our recommendations on the required permit to the Corps of Engineers.

Mitigation measures as they related to the Kofa Game Range will not mitigate project-caused wildlife habitat losses. Additional measures needed to compensate for these habitat losses are being investigated with the applicant and should be finalized in the near future. These measures and those for the Dome Rock Mountains will be closely evaluated as to potential effects on the Desert Bighorn Sheep.

8 4. Many of the mitigation proposals are of key importance to fish and
9 wildlife. They should all be "committed" prior to issuance of the final EIS. In addition, we feel that all power lines to the pumping stations should be buried to minimize long-term adverse impact.

10 5. A more detailed discussion of alternative pipeline routes would be helpful. The recent proposal by Northern Tier Pipeline Company for a pipeline from Fort Angeles to Clearbrook, Minnesota infers that theirs is the best route to get oil from Valdez to the pipeline in the central United States. This EIS should be compatible with the one BLM will prepare for the northern route. The need for the environmental disruption and damage along two routes across the mountains and deserts should be thoroughly justified.

11 6. Description of the Environment, Vol. 11, pages 2-686: The discussion of the short-grass prairie biome, which encompasses the final segment of new pipeline from Jal, New Mexico to Midland, Texas, does not mention the population of black-tailed prairie dog (Cynomys ludovicianus) which exist in the area. Although this office does not have detailed information on prairie dog densities in the counties in question, a survey of aerial photographs by Texas A&M University in 1970 revealed three colonies in Andrew, and 14 colonies in Martin, Counties, Texas. Both of these counties are less than 10 miles north of the proposed pipeline route. Intrusion on prairie dog colonies larger than 10 to 15 acres could have an impact on the habitat requirements of the black-footed ferret (Mustela nigripes), which could be a resident of the region. The last official sighting of a ferret in the Texas Panhandle of which we are aware occurred in 1971, near Dalhart. However, the nocturnal activity cycle of this endangered species prevents easy observation. Casual

11 sightings, even in areas where ferrets are known to exist, are rare.

12 In regard to the above, this office recommends that Chapter 5.8.3 of the statement (Mitigating Measures) be supplemented to include a commitment to have competent authorities examine any prairie dog colonies for ferret signs, if the final pipe alignment should cross any colonies larger than 10 acres.

The following specific comments not covered above also need your attention:

13 Chapter 1, Table 1.3. 1-1, pages 1-137. Item "Pipeline Construction across the Colorado River." The Fish and Wildlife Service does not issue easement to cross rivers. Our input to the river crossing comes through the Corps of Engineers' permit system.

14 Chapter 2, pages 2-657, second paragraph. The first sentence of this paragraph is incorrect. The Imperial National Wildlife Refuge extends to about Martinez Lake as shown on the map on pages 2-656, not to below Imperial Dam as stated in this sentence.

15 Chapter 3, pages 3-169, second paragraph. There is a total of 39.7 miles of new pipeline construction in Arizona, not 6 miles as shown.

16 Chapter 3, pages 3-241, second paragraph. The reference to temporary habitat alteration in the case of desert habitat is misleading since it requires many years for vegetation to reestablish itself once the soil is disturbed.

The Fish and Wildlife Service emphasizes that these comments on the draft statement do not preclude an additional and separate analysis which will be made to the Corps of Engineers for permits to work in navigable waters of the United States as required by Section 10 of the River and Harbor Act of 1899. All such permits are subject to review under existing authorities. The Fish and Wildlife Service may approve, with or without stipulations, or object to the proposed work, depending on the project effects on fish and wildlife resources.

We are glad to have had this opportunity to review the draft EIS and look forward to working with you and SOHIO to implement this project without unnecessary delay. By working together, the project effects on fish and wildlife habitat can be effectively minimized.

Stephen S. Taub

RESPONSE

Comment #1

This is still considered beyond the scope of this project, therefore no analysis has been made.

Comment #2

A mitigating measure to ensure continued public fishing access off Pier J has been added to Section 4.2.2.

Comment #3

The discussion of impacts of spoil disposal, including impacts on fisheries, has been expanded in Section 3.1.8.1.1.

Comment #4

This mitigating measure has been removed from the FES. A discussion of impacts on fauna from disposal activities has been added to Section 3.1.8.1.1, under Dredging and Filling Activities.

Comment #5

The discussion of impacts in Section 5.8.1 and in Section 3.1.8.1.1, under Year 2000, has been expanded. Should the Port of Long Beach apply to the Corps of Engineers for a permit to expand as indicated in the General Plan, a separate environmental assessment would be prepared. At that time, a discussion of mitigation for the loss of soft-bottom habitat would be appropriate.

Comment #6

The impacts on port fauna from all "future fills" are discussed only in relation to the effects of the construction for the SOHIO project in Section 3.1.8.1.1, under Year 2000.

Comment #7

Public access to the trestle would conflict with operations and security of the facility and would be a significant public safety hazard because of difficulty of enforcing public "no smoking" in an area containing potentially highly explosive and combustible materials.

Comment #8

Many of the mitigating proposals that have not been committed to by various local and state agencies have been retained in Section 4.3. Some of these measures are customarily committed to at the time various permits are issued by the respective agencies.

Comment #9

Burial of high-voltage power lines for the distances required by the proposal would probably not be technically feasible. However, as stated in Section 3.0, additional environmental analyses, including mitigation, would be necessary when specific rights-of-way are requested.

Comment #10

The alternatives have been discussed in more detail and a comparative table added in Chapter 8 of the FES.

Comment #11

A text change was made in Section 2.1.8.2, under Short-Grass Prairie Biome, and Section 3.1.8.2.1, under Terrestrial, to reflect this comment.

Comment #12

A text change was made in Section 4.2.6, under Jal to Midland, to reflect this comment.

Comment #13

This item was corrected in Section 1.3.1.1 in Table 1.3.1-1, under Department of the Interior.

Comment #14

The text was changed in Section 2.1.8.2, under Colorado Desert Biome, to reflect this comment.

Comment #15

Section 3.1.7.3.1, under Arizona, has been revised and the reference to 6 miles deleted.

Comment #16

The text was changed in Section 3.1.8.2.1, under Terrestrial, to reflect this comment.

U.S. DEPARTMENT OF LABOR
EMPLOYMENT AND TRAINING ADMINISTRATION
WASHINGTON, D.C. 20213

21 DEC 1976

Project Manager
Bureau of Land Management
Project Office
Post Office Box 660
Los Alamitos, California 90720

Dear Sir:

This is in response to your request that we review the Draft Environmental Impact Statement which the Bureau of Land Management (BLM) has prepared covering development of a crude oil transportation system from Valdez, Alaska to Midland, Texas.

We have reviewed the statement and have no comments.

Sincerely,

WILLIAM B. HEWITT
Administrator
Policy, Evaluation and Research

MARINE MAMMAL COMMISSION
1625 EYE STREET, N. W.
WASHINGTON, DC 20006

8 February 1977

Project Manager
Bureau of Land Management
P.O. Box 660
Los Alamitos, California 90720

Dear Sir:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the Draft Environmental Impact Statement for the Crude Oil Transportation System: Valdez, Alaska to Midland, Texas. As a result of this review, and pursuant to our responsibilities under Section 202(a) of the Marine Mammal Protection Act of 1972, we make the following comments.

Executive Summary

The Executive Summary does not adequately describe the potential environmental impacts of the proposed action. Despite the fact that 8 endangered, 1 threatened, 1 rare, and numerous other species of marine mammals may be adversely affected by the proposed action, the Summary contains no discussion of marine mammals. Marine mammals should be considered in the following sections of the Summary:

Marine Wildlife (pp. II-5--II-7)
Endangered Species (pp. II-7--II-8)
Exhibit I (p. III-2)
This exhibit presents a "summary evaluation of impacts...in the affected geographic areas of the proposed action" (p. III-1, paragraph 1). It does not, however, include information about the tanker route from the Port of Valdez to the Port of Long Beach and such information should be provided.

Additional Impacts (pp. III-7--III-8)
The impact of an oil spill on the California population of sea otters should be included in the presentation of "serious wildlife impacts" (p. III-7, paragraph 4).

Chapters 1 through 9

1 Oredging at the Port of Long Beach is proposed "only in the immediate berthing area to a depth of approximately 62 feet" (page 1-27, paragraph 1). The hazards associated with the dredging include turbidity and the release of trace contaminants and nutrients from the disturbed sediments. Page 1-29, last paragraph, includes the statement that "[t]he present depth in the area of the proposed Pier J berths is 42 feet mean lower low water (MLLW). This depth would allow 165,000 DWT vessels safe bottom clearance." Since the largest vessels SOHIO suggests using in the tanker fleet are 165,000 DWT (Executive Summary, page I-6, paragraph 3), the proposed dredging to a depth of 62 feet appears to be unnecessary.

2 "Except for the narrow northern part of Valdez Arm" the entire tanker route through Prince William Sound is described as "wide, deep, fairly smooth, and appears to be unobstructed" (page 2-146, paragraph 2). No mention is made of Seal Rocks, located just south of Hinchinbrook Entrance (60° 09' 49.097" N and 146° 50' 10.593" W) and Middle Rock just north of Valdez Narrows (61° 04' 53.437" N and 146° 39' 02.895" W). Both of these obstructions are navigational hazards which should be considered in the impact statement.

The biological information on marine mammals frequently is incomplete, inaccurate, and/or outdated, as exemplified in the following.

3 Pages 2-518--2-519: The population estimates for harbor seals are based on sources published 12 to 19 years ago and should be updated. Dr. George Harry of the Marine Mammal Division of the Northwest Fisheries Center, Seattle, should be able to provide more current information. Furthermore, the discussion of harbor seals should include information on their habitat requirements and food preferences.

4 Page 2-521, paragraph 5: The description of the northern fur seal colony on San Miguel Island as "a small breeding colony" is inaccurate. There now are more than 1,000 northern fur seals on San Miguel. In light of this fact, the statement that "[i]n 1971 this colony numbered between 200 and 300 breeding animals" (page 2-497, paragraph 2) should be updated. Mr. Robert DeLong of the Marine Mammal Division of the Northwest Fisheries Center, is the appropriate person to contact for the most current information.

5 Page 3-203, paragraph 2: Because there is a large breeding colony of northern elephant seals on San Miguel Island, this island should be included as one of the locations where northern elephant seal populations are found in California. For additional information, Dr. Burney J. LeBoeuf, University of California, Santa Cruz, should be contacted.

6 Pages 3-204, 3-229 and 3-233: Numerous sites in Prince William Sound where Steller sea lions, harbor seals and sea otters could be susceptible to oiling are omitted. The following source provides more accurate information on the distribution of these species.

Pitcher, K. W. 1975. Distribution and abundance of sea otters, Steller sea lions and harbor seals in Prince William Sound. Appendix A in Calkins, D. G., K. W. Pitcher, and K. Schneider. Distribution and abundance of marine mammals in the Gulf of Alaska. Alaska Department of Fish and Game Report. 31 pages and 19 charts.

There are numerous misspellings in reference citations and in species' names. The following examples demonstrate the obvious need for careful editing of the DEIS.

7 Page 2-489, paragraph 4: (Dailey and Brownell, 1972)
Page 2-491, paragraph 4: Balaenoptera musculus
Page 3-203, paragraph 1: (Simpson and Gilmartin, 1970)
Page 3-204, paragraph 6: Hinchinbrook Island
Page 3-228, paragraph 2: (C. Brosseau to K. W. Kenyon, 1971)
Page 3-232, paragraph 3: (pers. comm., R. J. Hofman)
Neither this citation nor the reference list cites to whom this personal communication was addressed.

7 Page A-253, #1: Arctocephalus
#3: The gray whale, listed here as Eschrichtius gibbosus, is cited as Eschrichtius robustus on page 2-494, paragraph 6.
#6: Sei whale

8 Page 3-232, paragraph 3, states that "[t]he California sea otter has been listed as a "threatened" species by the Marine Mammal Commission in 1976..." The Marine Mammal Commission does not have regulatory authority. The statement, therefore, should read that the Marine Mammal Commission recommended to the Department of Interior that the California population of sea otters be designated threatened under the Endangered Species Act of 1973.

On 14 January 1977, the U.S. Fish and Wildlife Service, pursuant to Section 4 of the Endangered Species Act of 1973, formally designated the Southern (or California) sea otter as a threatened species (42 Fed. Reg. 2967). In its justification for this determination, the Service stated that:

> A major spill of oil from a tanker in the waters in the vicinity of the range of the Southern Sea Otter is probably the most serious potential threat to the species. There seems little question that oil would be harmful to these animals, and, indeed, they are more susceptible to this problem than most species... Therefore, while the chances of an oil spill cannot be predicted, the possibility of such a disaster and its consequences to the Sea Otter population, coupled with the prospects for increasing oil activity in the area, contributes substantially to the decision to list the population as threatened (Ibid, p. 2966-2967).

9 According to the routes indicated in the DEIS, tankers would travel within less than 40 nautical miles of the northern portion of the California sea otter range and within less than 20 nautical miles of the southern portion of the range. In the event of a major oil spill in this area, the viability of the California sea otter population clearly could be threatened. Therefore, the impact statement should include a comprehensive discussion of the current status of the California sea otter population, its food habits, and all potential impacts of the proposed action, especially the probability of a spill occurring in this

9 area. Second order impacts, which might result in depletion of food supplies and the introduction of contaminants into organisms upon which sea otters feed, should be considered. A contingency plan for rescuing and rehabilitating oiled otters should be developed.

The DEIS infers that cetaceans can detect and avoid oil spills, but no responsible scientific evidence is given to support these inferences. Statements, such as the following, are ambiguous and misleading, and should be corrected and/or supported with appropriate literature citations.

10 Page 3-200, paragraph 3: "The highly mobile and intelligent whales and dolphins could avoid contaminated areas, but gray whales migrated through the Santa Barbara spill despite attempts by man to reroute them outside the Channel Islands (ibid). This may indicate there is no danger to whales migrating through oil."

11 Page 3-236, paragraph 4: "The Dall porpoise and harbor porpoise visit the Port and may be expected to retreat in case of an oil spill..."

12 Page 3-264, last paragraph: "...this [a large oil spill] could shift migration patterns to regions having a higher abundance of food items."

13 The discussion of the ten rare, threatened, or endangered species of marine mammals (page 3-263) is much too cursory to allow an adequate assessment of the potential impacts on these species. The table on page A-253 contains little useful information. It is not clear, for example, whether the population trends for the species numbered 3 through 10 are "increasing" or unknown. Furthermore, the term "oceanic" has little information content and therefore the distributions ("locations") of these species should be listed more precisely.

14 As noted earlier, the California sea otter population is classified as "threatened". Therefore Section 3.1.8.3.2. should include a comprehensive discussion of this population.

15 Chapter 4, entitled "Mitigating Measures", includes no programs to protect sea otters or other marine mammals. It is proposed that "SOHIO shall fund a biological monitoring program to assess the impacts of this project upon the viability of the marine communities in Port Valdez, Prince

15 William Sound, and the Copper River delta" (page 4-7, paragraph 2). This program should be expanded to include monitoring of marine mammal populations.

16 Page 5-21, paragraph 2, states that "[a]s creatures high in the food chain (e.g., pinnipeds, the sea otter, and the toothed whales), many marine mammals could ultimately suffer from an ecosystem contaminated with oil, although such a situation should not happen as a result of this project." However, the statement provides no evidence to support the conclusion that a polluted ecosystem should not happen as a result of this project. Besides pollution from possible oil spills, chronic low-level pollution will result from bilge discharge and from chronic low level fuel leaks, etc. (page 3-7, paragraph 1). Many marine mammals are top order carnivores, and may be particularly susceptible to magnification of pollutants in marine food chains. The impact statement should provide a complete discussion of possible second order effects, including, but not limited to, food chain magnification of pollutants.

17 The potential impacts on marine mammals resulting from increased ship traffic must be considered in more detail. It is noted in the introduction of Chapter 3, for example, that "increased vessel traffic and noise (both of particular importance to marine mammals)" would result from the proposed action. Yet this impact is not discussed in any of the sections concerning marine mammals. Noise pollution from the tankers could cause acoustically sensitive species (e.g., porpoise) to abandon preferred breeding, feeding, or resting sites and this possibility should be considered in the impact statement. The increased probability of collisions between marine mammals and ships likewise should be considered.

In summary, the best available evidence suggests that the potential impacts on marine mammals may be significantly greater than indicated in the DEIS. Relevant information has been overlooked, inaccurately cited and possibly misinterpreted. Hopefully, our comments will be useful in rectifying some of the deficiencies. More information is available from published and unpublished sources. Therefore, we recommend that you consult with the persons on the attached list before completing the final impact assessment.

Sincerely,

John R. Twiss, Jr.
Executive Director

Mr. Thomas P. Dohl
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(sea lions and harbor seals/Prince William Sound)

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Dr. Charles D. Woodhouse, Jr.
Santa Barbara Museum of Natural History
2559 Puesta Del Sol Road
Santa Barbara, CA 93105
805/963-7821
(sea otters, harbor seals and sea lions/California)

RESPONSES

Comment #1

The FES has been revised to state that dredging to a depth of 62 feet is required for passage of 165,000 DWT tankers.

Comment #2

The Tanker Traffic Study has been expanded in the discussion of navigational hazards in Prince William Sound and is included as Appendix A1.1.1.1-A.

Comment #3

The discussion of harbor seals is considered to be adequate relative to expected impacts.

Comment #4

The text has been changed to reflect this comment.

Comment #5

The text was changed in Section 3.1.8.1.2 to reflect this comment.

Comment #6

The text was changed in Section 3.1.8.1.2 to reflect this comment.

Comment #7

These corrections have been made in the FES.

Comment #8

The text was changed to reflect this comment.

Comment #9

The text was changed in Section 3.1.8.3.2, under Ocean, to reflect this comment.

Comment #10

The text was changed in Section 3.1.8.1.2, under Cetaceans, to reflect this comment.

Comment #11

This statement was deleted from the text in Section 3.1.8.1.2, under Port Valdez.

Comment #12

This sentence was deleted from the text in Section 3.1.8.3.2, under Ocean.

Comment #13

Table A2.1.8.3-1 has been clarified in the Appendix.

Comment #14

The text was changed in Section 3.1.8.3.2, under Ocean, to include the California sea otter.

Comment #15

Since the SOHIO project, if approved, would only be one of many users of Port Valdez, it would appear unreasonable for SOHIO to be required to fund any monitoring programs. No text change was made.

Comment #16

BLM believes the text adequately discusses potential impacts on marine mammals in light of existing available data.

Comment #17

See response to Comment 16 above.

DEPARTMENT OF TRANSPORTATION
MATERIALS TRANSPORTATION BUREAU
WASHINGTON, D.C. 20590

DIRECTOR

FEB 14 1977

Mr. Charles R. Tulloas
Project Manager, SOHIO EIS Project
Bureau of Land Management
U.S. Department of the Interior
P.O. Box 660
Loa Alamitoa, CA 90720

Dear Mr. Tullosa:

1 The Draft Environmental Impact Statement (EIS) on the Crude Oil Tranaportation Syatem: Valdez, Alaska, to Midland, Texas, (as propoaed by the Sohio Transportation Company), haa been reviewed by the staff of the U.S. Coast Guard and the Materiala Tranaportation Bureau (MTB), Office of Pipeline Safety Operationa (OPSO), particularly with regard to safety of the operating transportation system. The enclosed comments, aa related to the particular sections of the EIS, complement my letter of January 28 wherein we commented on your letter of September 10, 1976, and material accompanying that letter.

The completed pipeline to be put in crude oil aervice between Long Beach, California, and Midland, Texas, muat comply with the requirementa of 49 CFR Part 195, "Transportation of Liguida by Pipeline," for both the new construction and the line converted from natural gaa service. Where it is not feasible to comply with a specific section of Part 195, a waiver must be obtained from the OPSO, MTB, Department of Tranaportation. A request for such a waiver must be supported with adequate justification to show why compliance with the specific requirement is not appropriate, what alternative steps if any will be taken to provide for public aafety, and why it would be in the public interest to grant such a waiver. The Federal Safety Standards for Transportation of Natural and Other Gas by Pipeline, 49 CFR Part 192, muat be met with regard to the abandonment or inactivation of the natural gas pipeline facility. Copies of 49 CFR Parts 195 and 192 (with amendments to date) are enclosed.

We appreciate your interest in the pipeline safety and marine aspects of this transportation proposal. If we may provide further information or aaaiatance, please contact me.

Sincerely,

James T. Curtis, Jr.

Enclosures

COMMENTS RELATIVE TO THE PIPELINE PORTION OF THE PROPOSED VALDEZ, ALASKA, TO MIDLAND, TEXAS, CRUDE OIL TRANSPORTATION SYSTEM

1. Maps. Additional information is needed about assuring pipeline safety in the following flood prone and wash areas: Whitewater River in California (Map 2.1.5-3); Colorado River at California-Arizona border and Gila River, Arizona (Map 2.1.5-6); and San Pedro River, Arizona (Map 2.1.5-8).

2. Executive Summary, page I-21 and page I-28, I-29--Discussion of river crossings and depth of line burial. Such crossings must meet the requirements of Section 195.248 with regard to "cover over buried pipeline."

3. Executive Summary, page I-29, next to last paragraph--Hydrostatic testing of the oil pipeline must meet the requirements of Subpart E, 49 CFR Part 195.

4. Executive Summary, page II-5, Geology--The proposed pipeline routing in Southern California crosses major earthquake fault zones. The EIS should identify what special design, construction, operation, and maintenance provisions are being made to assure safe operation of the crude oil pipeline in service.

5. Executive Summary, page IV-1--Additional information is needed in the EIS concerning: geotechnic investigations in the vicinity of active and suspected faults (particularly the San Jacinto and San Andreas fault systems); the installation of pipe aboveground in the vicinity of high risk soils; and the use of a system for detection of small subsurface oil leaks.

6. Executive Summary, page IV-2--Additional information is needed concerning: the preparation of oil spill contingency plans for the pipeline; installation of pipe in soil susceptible to liquefaction; and inspection and modification of existing pipe to determine proper reinforcing steps.

7. Chapter 1, page 1-24, Life of the Project--Additional information is needed about what steps will be taken to verify the condition of the existing lines with regard to its maintenance and effectiveness of corrosion protection. For example, are in-line survey pigs, electrical surveys, check of cathodic protection records, or sampling bell-hole inspections to be utilized?

8. Chapter 1, page 1-41, Review of condition of existing lines in relation to standards for liguid petroleum service--The EIS should show: What plans are developed for doing this? How will they relate to the requirements of Part 195? How will they assure safety of the pipeline should a waiver action be requested?

9. Chapter 1, pages 1-42 and 1-43--Hydrostatic testing requirements for the completed line are contained in Subpart E, 49 CFR Part 195 (The same requirement applies to Line Pipe, page 1-74, and Testing, pages 1-110 and 1-111; and testing records must be in accordance with Section 195.310).

10. Chapter 1, page 1-47--Depth of cover and clearance requirements stated in last paragraph should be corrected to be consistent with Sections 195.248 and 195.250 of 49 CFR Part 195.

11. Chapter 1, page 1-52, Pipe Bending, Laying, and Welding--EIS should show that welding, welder qualifications, weld testing, and other construction operations must meet requirements of Subpart D, 49 CFR Part 195.

12. Chapter 1, page 1-60, second paragraph, "for submerged crossings,"--Pipe burial must meet requirements of Section 195.248.

13. Chapter 1, page 1-68--Valve requirements which must be met are in Section 195.116, and valve location requirements in Sections 195.258 and 195.260 of 49 CFR Part 195.

14. Chapter 1, page 1-75, Corrosion Control--Requirements are contained in Subpart D--Construction and Subpart F--Operation and Maintenance of 49 CFR Part 195.

15. Chapter 1, page 1-92 through 1-110--Pump station design, construction, and operation as well as pipeline operation, control, and communications must be carried out in accordance with applicable parts of 49 CFR Part 195.

16. Chapter 1, page 1-111, Hydrostatic testing requirements--It cannot be assumed that the previous hydrostatic test pressure meets the requirements of 49 CFR Part 195 without an examination of the testing records, operating records of the existing line, and plans for the crude oil line operations.

17. Chapter 1, page 1-112--Pipeline markers must meet the requirements of Section 195.410.

18. Chapter 1, page 1-117, last paragraph, unattended stations--Requirements of Section 195.436 regarding security of facilities must be met.

19. Chapter 1, page 1-126--Inspection of rights-of-way must be in accordance with Section 195.412.

20. Chapter 1, page 1-142--Wording of third paragraph should be corrected to read as follows: The Department of Transportation

(DOT) has the authority for safety regulation of the design, construction, operation, and maintenance of pipelines carrying crude oil, hazardous materials, and petroleum products in liquid form--Federal Safety Standards for Liquid Pipelines (49 CFR Part 195). Federal Safety Standards for Transportation of Natural and Other Gas by Pipeline (49 CFR Part 192) provide for the Abandonment or Inactivation of Facilities in Subsection 192.727. These regulations would apply to the project.

21. Chapter 1, page 1-144 through 1-147--Correct Department of Transportation entries to read: Department of Transportation, Materials Transportation Bureau, Office of Pipeline Safety Operations, 49 CFR, Part 195, Transportation of Liquids by Pipeline, and on page 1-146 under Pipeline, add the reference, Federal Safety Standards for Transportation of Natural and Other Gas by Pipeline, 49 CFR, Part 192 (with regard to abandonment of gas pipeline facilities).

22. Chapter 2, Volume I, page 2-67--Additional engineering information should be included in the EIS about pipeline design at fault locations for Contingency Level Earthquake, particularly across the San Jacinto fault. Aboveground pipe configurations should be included.

23. Chapter 2, Volume I, pages 2-84 and 2-85--EIS should provide additional information about the design provisions for tank farm facilities and affected pipeline sections where soil liquefaction may occur.

24. Chapter 3, page 3-22--Further details needed about pipeline design in potential landslide areas and about the oil spill contingency plans.

25. Chapter 3, page 3-25 through 3-30--Details of pipeline, auxiliary, and terminal facilities for possibilities of earthquake and related seismic effects need further explanation, especially at terminal site, and San Jacinto and San Andreas fault zones (for Contingency Level Earthquake).

26. Chapter 3, pages 3-37 and 3-38--Additional details are needed about hydrostatic test plan to assure that Subpart E, 49 CFR Part 195, is met.

27. Chapter 3, page 3-93 through 3-107, Oil Spills and Leaks--Close attention needs to be given to these matters in the final EIS and relate oil spill plan to requirements of Part 195.

28. Chapter 4, pages 4-3 and 4-4--Seismic, high risk soils, landslide areas, and fault zones (see earlier comments 4, 5, 6, 22, 23, 24, 25, and also comments 30 and 32).

29. Chapter 4, page 4-4, Oil Spill Contingency Plans for Pipelines--See comments 6, 24, 27, and 36.

30. Chapter 4, page 4-17--Further details needed in final EIS about Dominguez Hills tank farm design provisions for earthquakes.

31. Chapter 4, page 4-21--Pipe burial in San Gabriel and Santa Ana Rivers must meet requirements of Section 195.248 as a minimum.

32. Chapter 4, page 4-23, San Jacinto, Banning-Mission Creek, and San Andreas faults--Pipe design and construction must meet Part 195. Agencies with jurisdiction should include U.S. Department of Transportation, Materials Transportation Bureau, Office of Pipeline Safety Operations. (Note: In all Sections where Department of Transportation, Office of Pipeline Safety, is indicated as responsible agency, listing should be corrected to Department of Transportation, Materials Transportation Bureau, Office of Pipeline Safety Operations.)

33. Chapter 4, pages 4-30 and 4-31, Colorado River Crossing--Under agencies with jurisdiction add U.S. Department of Transportation, Materials Transportation Bureau, Office of Pipeline Safety Operations.

34. Chapter 4, page 4-50, Hydrostatic test--Additional details are needed to assure that testing meets Subpart E, 49 CFR Part 195.

35. Chapter 4, pages 4-54 and 4-55, Pipeline Remote Control Valves--Agencies with jurisdiction should include Department of Transportation, Materials Transportation Bureau, Office of Pipeline Safety Operations.

36. Chapter 7, page 7-5, Oil Spill Hazard--See comments 6, 24, 27, and 29.

37. Appendix A, page A-1 through A-41--Engineering and operating data need to be augmented with essential details and compared with requirements of 49 CFR Part 195 to assure that completed line will meet Federal liquid pipeline safety standards. Special attention must be given to records for existing pipelines, particularly with regard to maintenance, leak records, testing, and additional requirements necessary for crude oil service. Plans should be developed to prevent "small corrosion and weld leaks," in lines 1103 and 1110 (page A-5, third paragraph). 49 CFR Part 195 should be identified in Design Criteria Section (e.g., page A-14 "Code References").

COMMENTS RELATIVE TO SEA LEG, MARINE FACILITIES, AND WATER CROSSINGS--U.S. COAST GUARD

1. Section 1.1.1.1 Sea Leg, page 1-7: Description of vessels expected to utilize the proposed marine terminal should be expanded to provide a thorough discussion of their technical design characteristics such as length, beam, draft and maneuvering capabilities.

2. Section 1.1.1.1 Sea Leg, page 1-11:

a. It is recommended that this section include a more thorough discussion of the tanker route, particularly in the area of the Santa Barbara Channel Islands where the Corps of Engineers has been requested to establish a Safety Fairway to forestall the intrusion of oil drilling rigs into the Traffic Separation Scheme. This area is also deserving of assessment for the possibilities of LNG facilities at Point Conception and/or Oxnard and the associated ship traffic. Offshore LNG facilities are also being considered elsewhere along the Santa Barbara Channel and Channel Islands. Moreover, the area to the south of the Channel Islands is associated with the Pacific Missile Range and the relationship to that activity should be explored.

b. It is recommended that this section include a discussion of those factors affecting arrival/departure of tankers such as visibility, wind speed, and other shipping traffic. A description of holding or loitering procedures for vessels should be included.

c. Commander, Eleventh Coast Guard District, has been directed to examine tanker routes in the area of convergence to San Pedro Bay and the Port of Long Beach.

3. Section 1.2.1 Sea Leg, page 1-26: Nationally recommended routes from Prince William Sound to the west coast of the United States are presently being developed. The northern terminus is firm. The southern terminus is open. Various alternatives are under consideration. Final selection is expected before mid-1977.

4. Section 1.2.2.1 Tanker Berths, page 1-30:

a. The description of the berths at the proposed terminal site should include a discussion of steps taken to design the facility in compliance with the Pollution Prevention Regulations contained in Title 33, Code of Federal Regulations, Parts 154 and 156.

b. The Coast Guard maintains a 2,400 volt submarine cable extending from the south side of Pier J at 33°14'18"N, 118°11'35"W to provide power for the light, fog signal and radio beacon at the Long Beach Light. Construction of the proposed marine terminal may require rerouting the cable. The Chief, Aids to Navigation Branch, should be contacted at (213) 590-2222, FTS 984-9222 for detailed information concerning the cable and Long Beach Light. Further, Aids to Navigation will be required during construction of the terminal and to mark the new facilities when completed.

5. Section 1.2.3.2 Water Crossings, page 1-56:

a. The Coast Guard is responsible for issuing permits approving the location and plans of bridges across navigable waters of the United States. Actions identified in the EIS that may require bridge permits include the proposed overhead pipeline crossing of the Los Angeles River, temporary or floating construction bridges, and modification of existing bridges. Therefore, Coast Guard bridge permits should be included in the lists of other Federal actions on pages 1-3, 1-4, and 1-137.

b. Table 1.2.3.2.2 lists major waterway crossings; however, smaller waterways which may not appear to be navigable, in fact, may be navigable in law. It is recommended that early contact be made with the appropriate Coast Guard District Commander to determine which waterways to be crossed are navigable. For California and Arizona, contact District Commander (oan), Eleventh Coast Guard District, Union Bank Building, 400 Oceangate Boulevard, Long Beach, California 90822. For New Mexico and Texas, contact District Commander (obr), Eighth Coast Guard District, Hale Boggs Federal Building, 500 Camp Street, Room 1140, New Orleans, Louisiana 70130.

c. Bridge permit actions may be taken on the basis of the Bureau of Land Management's final EIS if it is determined by the District Commander that the EIS adequately assesses the impacts of the permit action. Assessment of construction and operational impacts appear to be adequate in the draft EIS. The final EIS should also include an assessment of the effect on waterway use.

d. Bridge permit actions are subject to the provisions of Section 4(f) of the Department of Transportation Act. Under that Act, a bridge permit cannot be approved if the bridge will use land from a publicly owned park, recreation area or wildlife and waterfowl refuge, or any historic site of national, State, or local significance unless there is no feasible and prudent alternative and the project includes all possible planning to minimize harm to the protected property. There are several

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parks and recreation areas along waterways which will be affected. It is not possible from the level of design presented in the draft EIS to determine if any bridges will use land from the 4(f) properties. Therefore, if waterways adjacent to 4(f) properties are found to be navigable, the Bureau and the applicant should work closely with the District Commander in determining if any bridges will use 4(f) properties.

6. Section 1.3.1 Federal Government, page 1-135: The U.S. Coast Guard is presently in the process of preparing a regulatory package entitled "Navigation Safety Regulations." These are contained in Coast Guard Docket Number 74-79. The first concept and a solicitation for input first appeared in the Federal Register in mid-1974. The innovative perspective, the sheer magnitude of the project itself, and the public's response to the project dictated extensive expenditure of energy to refine it to the next stage. That stage--a notice of proposed rulemaking--was reached this past spring and published on 6 May 1976 in 41 FR 18766. Again, the project's magnitude and the public's response generated extensive review and rewrite. The project is very near to completion at the present time.

In general, these regulations will apply to all self-propelled vessels of 1,600 or more gross tons operating in the navigable waters of the U.S., except the Panama Canal and the St. Lawrence Seaway. Their general thrust is to set a minimum level of navigation practice and associated equipment. The purpose is to reduce the level of vessel casualties resulting from unprofessional performance or substandard equipment.

7. Table 1.3.1-1 Federal Agencies Having Project Approval Requirements, page 1-137, should be amended to read as follows:

(1) Agency: Department of Transportation
(2) Responsible Subdivision: U.S. Coast Guard
(3) Activity Requiring Approval
  (a) pipeline construction crossing navigable waters
  (b) design and operation of private aids to navigation
  (c) oil transfer operations between vessel and facility
  (d) safe shipping practice
(4) Form
  (a) permit
  (b) review/approval
  (c) review/approval
  (d) review/approval
(5) References
  (a) 33 CFR 115
  (b) 33 CFR 66
  (c) 33 CFR 126 and 154-156
  (d) 33 CFR 126 and 46 CFR 30-40

8

8. Section 2.1.1.1 Southern California Coastal Region, page 2-6: The climatological description does not provide sufficient data and analysis of two critical elements--wind speed and visibility. It is recommended that the statement include an analysis of the diurnal and seasonal patterns associated with these elements. This information could provide a basis to assess the impacts associated with acceptable approach/departure and docking conditions as per paragraph 1.2.b. above.

9. Section 2.1.7.1.2 Bays and Estuaries, page 2-319: Salinities cited in the last paragraph should probably be recorded as parts per thousand (ppt or °/00), not percent.

10. Section 2.1.8.1.2 Coastal, Bays, and Estuaries, page 2-514: The reference "Reish, 1964a," cited in the third paragraph does not appear in the reference section.

11. Section 2.1.13.1 Land, page 2-858: Some mention should be made of existing (and charted) traffic separation schemes in the Santa Barbara Channel, in the approaches to Los Angeles/Long Beach, in the approaches to San Francisco, and in the Strait of Juan de Fuca. (See comment 3.(a) regarding nationally recommended routes between Prince William Sound and the west coast.)

12. Section 2.1.14.2 Vessel Traffic, page 2-873:

a. It should be stated that based on past casualty data, the Los Angeles/Long Beach Harbors were listed twentieth in order of need for a Vessel Traffic System on a priority list of twenty-two U.S. ports. At this time, no projected date of operation has been established.

b. It is recommended that this section include a quantified description of local and regional traffic patterns associated with commercial shipping and fishing, recreational boating, military operations and development of the Outer Continental Shelf oil and gas resources.

13. Section 3.1.2.1.1 Construction, page 3-5: Release of incompletely oxidized particles would also increase BOD, as noted in Section 3.1.5.1.1. Chlorinated hydrocarbons and heavy metals released from sediments might also be toxic to biota. Sulfides may be released, depending on sediment composition and presence of anaerobic bacteria. Changes in pH may occur.

14. Section 3.1.4.2.1 Conversion/Construction, page 3-38: Thirty-five percent salt content should be 35 parts per thousand if sea water is being described. (See comment 9.(a).)

15. Section 3.1.5.1.2 ff Operation, page 3-52ff: Comment 6 applies.

9

16. Figure 3.1.5.1.2-10, page 3-86: The tanker route represented is probably not the one which will ultimately be approved. (See comment 3.)

17. Section 3.1.5.2.2 Operation, page 3-93ff: Problems associated with pipeline spills along river crossings will be magnified during flood flows when oil may be carried onto agricultural land and during low flows when water resources become more valuable. Prevention techniques and immediate cleanup plans are essential.

18. Section 4.2.1 ff Sea Leg, page 4-7ff:

a. This presentation is defective in that it does not address measures being developed under U.S. Coast Guard jurisdiction. Traffic Separation Schemes have been designed, are charted, and are in use on a temporary basis for purposes of user evaluation. These will be fully implemented as appropriate. A manned Vessel Traffic Service is under construction; completion is expected by mid-1977. Federal regulations prescribing behavior of vessels in the Prince William Sound approaches to the Port of Valdez are under development. Notice of Proposed Rulemaking is expected to be published in the Federal Register early in February 1977. Final regulations have been promised by mid-1977.

b. The Coast Guard is concerned with the overall lack of indepth study of results of potential oil spills in Prince William Sound and along proposed tracks that loaded vessels will follow. Recognition of the very limited capabilities to clean open water oil spills with present state of the art equipment should be included. This should be reflected in the final EIS.

c. Oil spill contingency plans for sea leg segments of this project will be reviewed by the Coast Guard when released.

19. Section 4.2.7 General, page 4-49ff: Mitigating measures might include burying power lines instead of running them overhead. A trencher would impact only a narrow strip along the proposed route and power lines would not be visible. Problems associated with geologic subsidence and of trenching through rock should be addressed.

20. Section 9.5 Federal Participation, page 9-4: Coast Guard representatives from the Seventeenth Coast Guard District were present at the meeting held in Juneau, Alaska.

21. Enclosed is a list of definitions common to the maritime industry. Use of nonstandard terminology should be avoided.

10

In particular, the meaning of the term "purging," used repeatedly when discussing air quality, is not clear in light of the suggested definitions enclosed. If "purging" is understood to be a deliberate introduction of fresh air to the tank by driving out hydrocarbons compelling the tank to enter the explosive range, it would appear to create unnecessarily an unsafe condition if in proximity to oil storage and should be prohibited by the Coast Guard under authority of the Ports and Waterways Safety Act of 1972. The definition of, reason for, methods, number of tanks affected, frequency and duration of "purging" should be supplied.

Enclosure: (1) List of Standard Definitions

There are a number of operations associated with oil tankers that may cause the emission of hydrocarbon to the atmosphere. These operations occur with varying frequency and in different locations. The following discussion is for the purpose of distinguishing among these operations:

Venting -- The volume of vapor in oil tanks expands and contracts with variations in temperature just as occurs with the gasoline tank of an automobile. However, the oil tank in a tanker is not freely open to atmosphere. To prevent a buildup of pressure differential, a weighted pressure-vacuum valve with a flame screen is fitted to each tank. The valve lifts to relieve when a pressure differential of 2 pounds per square inch is reached. When the pressure within the tank is the greater, some hydrocarbons are emitted.

Bunkering -- This is the process of refueling the ship's fuel tanks. Just as when refueling an automobile, the addition of fuel displaces the vapor to the atmosphere. The frequency with which this emission takes place and its locale depends upon the size of the tanks, the ship's fuel consumption, and its operating schedule.

Ballasting -- This action is necessary after the cargo has been discharged to immerse hull, propeller and rudder in the interest of controllability of the ship. Hydrocarbons are emitted when water is introduced into some of the cargo tanks. The quantity of ballast taken on can be held to a certain minimum level for purposes of clearing the port unless there are strong winds when a greater amount of ballast would be taken on for safety reasons. Once at sea, the Master will add more ballast and may take on still greater quantities if the ship encounters heavy weather. In vessels with segregated ballast tanks the water is added into tanks dedicated to that purpose and no contamination with the oil residues remaining in the oil cargo tank takes place nor is there any emission of hydrocarbons. In vessels without the segregated ballast feature, operating on a return voyage to an oil loading source where there is no oily water reception facility, the ship will probably engage in tank cleaning.

ENCLOSURE (1)

Tank Cleaning -- This operation is a lengthy one and is usually carried out at sea, to prepare cargo tanks for a change of cargo, as from crude oil to a refined product, or from crude oil to grain transport. It may also be done to certain tanks in connection with ballasting. To clean the tanks, a machine which plays powerful jets of water upon the interior surfaces is lowered according to a fixed schedule from the top to the bottom of the tank over a period of several hours. As a safety measure the atmosphere in the tank may be inerted before the process begins. This action has been adopted relatively recently because of unexplained explosions which occurred from six or seven years ago in vessels engaged in this operation.

Alternatively, the hydrocarbons may be emitted by blowing in fresh air to bring the tank below the explosive limit before washing begins. The accumulation of oil and water is gathered and separated. It was once common practice to pump the accumulation overboard and this practice termed "operational pollution" has been responsible for most of the oil dumped in the sea, much more than due to tanker accidents. The procedure is now prohibited; instead, the separation process returns to the sea clean water and retains the slops on board. The slops are either discharged ashore or are added on top of the next load of cargo lending the name "load on top" to this practice.

Once a tank has been cleaned and "stripped" of residue, it is ready for the new, different cargo. Clean sea ballast may also be taken in permitting the vessel on loading the next cargo to discharge the clean ballast water into the harbor at the loading facility without pollution.

There is a new method which the industry is experimenting with in the interest of reducing water pollution called crude washing where the oil itself is used as the solvent to speed removal of residues on the interior surfaces of the tank.

The tank, after tank cleaning, is still not regarded as safe for personnel to enter as hydrocarbons are still present.

Gas Freeing -- This process is conducted at infrequent periods when necessary to enter a tank for inspection or repairs such as burning and welding. Before personnel are permitted to enter a tank, the tank must be certified gas-free by a Marine Chemist. To reach the gas-free stage, the tank must be cleaned as described in the paragraph above and in addition the atmosphere of the tank after tank cleaning must be changed a sufficient number of times to insure that no explosive or toxic condition exists and that the tank is safe for human entry. Of course, the process of changing the atmosphere will lead to emission of such hydrocarbons and inert gas as may remain after tank cleaning has been consummated.

Inerting -- In this process an oil tank is made to draw in inert gas instead of fresh air as the cargo is pumped out thereby lowering the oxygen content of the tank atmosphere making it safe from explosion or fire. The inert gas most commonly used is washed, cooled combustion exhaust drawn from the ship's boiler uptakes.

RESPONSE

Comment #1

The time between receipt of this letter and publication of the FES did not permit detailed consideration of and response to the enclosed comments. However, many of the points raised have been responded to previously in this section and many changes in the FES were made which reflect these comments. References to DOT regulations regarding the project were added to Section 1.2.3.2, under Preconstruction Activities, and Section 1.3.1 of the FES.

DEPARTMENT OF TRANSPORTATION
MATERIALS TRANSPORTATION BUREAU
WASHINGTON, D.C. 20590

JAN 25 1977

DIRECTOR

Mr. Charlea R. Tulloss
Project Manager, SOHIO EIS Project
Bureau of Land Management
U. S. Department of the Interior
P. O. Box 660
Los Alamitos, CA 90720

Dear Mr. Tulloss:

Your September 10, 1976, letter to the Secretary of Transportation concerning the Federal Environmental Impact Statement (EIS) of the Standard Oil Company of Ohio (SOHIO) for transporting Prudhoe Bay crude oil from Valdez, Alaska, to Midland, Texas, has been referred to the Materials Transportation Bureau (MTB) for response.

We have reviewed the preliminary list of mitigating measures relative to the project EIS which was enclosed with your letter.

The outline listed in Chapter 4, Engineering, as Item 8 does not recognize that both the new pipelines to be constructed and the existing pipelines to be converted from natural gas to crude oil use must comply with the requirements of 49 CFR Part 195, "Transportation of Liquids by Pipeline." Part 195 is mandatory and includes by reference all of the ASTM, ANSI, ASME, and API standards listed under Chapter 4.

The new facilities in the 245 miles of pipeline addressed in the proposed outline of the EIS and any new facilities required in the conversion of the 788 miles of existing natural gas pipelines to crude oil service use must comply with Part 195. The portions of the 788 miles of pipeline being converted to a new type of service are for the purpose of safety regulation considered the same as new pipelines and, therefore, must comply with Part 195. Where it is not feasible to comply with a specific section of Part 195, a waiver must be obtained from the Office of Pipeline Safety

Operations (OPSO), MTB, Department of Transportation. A request for such a waiver must be supported with adsquate justification to show why compliance with the specific requirement is not appropriate, what alternative steps if any will be taken to provide for public safety, and why it would be in the public interest to grant such a waiver.

The conversion of the 788 miles of existing natural gas pipelines to crude oil use will also have some effect on the environment and should also be addressed in the EIS. The degree of impact that this work will have on the environment will depend on the changes necessary to modify the pipeline from its present condition to that required by Part 195. It appears that this would be of a magnitude that it should be considered in the EIS.

OPSO has Regional Offices in Houston, Texas; Burlingame, California; Kansas City, Missouri; Atlanta, Georgia; and Washington, D.C. These offices are not staffed to provide onsite inspection of conatruction, but rather we hold the operator of the facilities involved responsible for assuring compliance with Part 195. On a random basis, the pipeline operators are inspected and required to show that they are in compliance with the regulations.

Thank you for your interest in pipeline safety.

Sincerely,

James T. Curtis, Jr.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION NINE
Two Embarcadero Center, Suite 530
San Francisco, California 94111

ARIZONA
CALIFORNIA
NEVADA
HAWAII
GUAM
AMERICAN SAMOA

IN REPLY REFER TO
9ED

January 17, 1977

Mr. Charles Tulloss
Project Manager
Bureau of Land Management
EIS Project Office
P.O. Box 660
Los Alamitos, California 90720

Dear Mr. Tulloss:

We have reviewed the Draft Environmental Impact Statement for the Crude Oil Transportation System from Valdez, Alaska, to Midland, Texas, and offer the following comment:

> We concur with the mitigation proposed in Chapter 4 to reduce the impacts to the Ehrenberg Rest Area on Interstate 10 by moving the pump station to an alternate site. This mitigating measure will maintain the aesthetic quality and prevent noise impacts to the rest area.

We appreciate this opportunity to review the subject Draft EIS and would like to receive two copies of the Final Statement when it becomes available.

Sincerely yours,

for F. E. Hawley
Regional Administrator

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS
COMMANDER(mepps)
ELEVENTH COAST GUARD DISTR
UNION BANK BLDG.
400 OCEANGATE
LONG BEACH, CA. 90822

5922/13.03

From: Commander, Eleventh Coast Guard District
To: Commandant (G-WEP-7/73)

Subj: Draft Environmental Impact Statement for Crude Oil Transportation System: Valdez, Alaska to Midland, Texas

Ref: (a) Commandant (G-WEP-7/73) letter 16476/7.b.230 of 3 DEC 76

1. The following comments are submitted in accordance with reference (a):

a. Section 1.1.1.1 Sea Leg page 1-7

1 (1) The description of the vessels expected to utilize the proposed marine terminal should be expanded to provide a thorough discussion of their technical design characteristics such as length, beam, draft and maneuvering characteristics.

b. Section 1.1.1.1 Sea Leg page 1-11

2 (1) It is recommended that this section include a more thorough discussion of the tanker route, particularly in the area of the Santa Barbara Channel Islands where the Corps of Engineers has been requested to establish a [redacted] Fairway to forestall the instrusion of oil drilling rigs into the Traffic Separation Scheme. This area is also deserving of assessment for the possibilities of LNG facilities at Pt. Conception and/or Oxnard and the associated ship traffic. Offshore LNG facilities are also being considered elsewhere along the Santa Barbara Channel and Channel Islands. Moreover, the area to the south of the Channel Islands is associated with the Pacific Missile Range and the relationship to that activity should be explored.

3 (2) It is recommended that this section include a discussion of those factors affecting arrival/departure of tankers such as, visibility, wind speed and other shipping traffic. A description of holding or loitering procedures for vessels should be included.

c. Section 1.2.2.1 Tanker Berths page 1-30

4 (1) The description of the berths at the proposed terminal site should include a discussion of steps taken to design the facility in compliance with the Pollution Prevention Regulations contained in Title 33, Code of Federal Regulations, parts 154 and 156.

Subj: Draft Environmental Impact Statement for Crude Oil Transportation System: Valdez, Alaska to Midland, Texas

5 (2) The Coast Guard maintains a 2,400 volt submarine cable extending from the south side of Pier J at 33°14'18"N, 118°11'35"W to provide power for the light, fog signal and radio beacon at the Long Beach Light. Construction of the proposed marine terminal may require rerouting the cable. The Chief, Aids to Navigation Branch should be contacted at (213) 590-2222, FTS 984-9222 for detailed information concerning the cable and Long Beach Light. Further, Aids to Navigation will be required during construction of the terminal and to mark the new facilities when completed.

d. Section 1.2.3.2 Water Crossings page 1-56

6 (1) The U. S. Coast Guard is currently investigating the navigability of the Los Angeles River. A preliminary study indicates that the proposed pipeline crossing of the Los Angeles River would be above the navigable portion of the Los Angeles River. A Coast Guard bridge permit will be required if the proposed overhead pipeline is crossing over navigable waters of the United States.

7 e. Table 1.3.1-1 Federal Agencies Having Project Approval Requirements page 1-137, should be amended to read as follows:

(1) Agency: Department of Transportation

(2) Responsible subdivision: U. S. Coast Guard

(3) Activity Requiring Approval

(a) pipeline construction crossing over navigable waters

(b) design and operation of private aids to navigation

(c) oil transfer operations between vessel and facility

(d) safe shipping practice

(4) Form

a. Permit

b. review/approval

c. review/approval

d. review/approval

Subj: Draft Environmental Impact Statement for Crude Oil Transportation System: Valdez, Alaska to Midland, Texas

7 (5) References

(a) 33 CFR 115

(b) 33 CFR 66

(c) 33 CFR 126 and 154-156

(d) 33 CFR 126 and 46 CFR 30-40

f. Section 2.1.1.1 Southern California Coastal Region page 2-6

8 (1) The climatological description does not provide sufficient data and analysis of two critical elements - wind speed and visibility. It is recommended that the statement include an analysis of the diurnal and seasonal patterns associated with these elements. This information could provide a basis to assess the impacts associated with acceptable approach/departure and docking conditions as per paragraph 1.b.(2) above.

g. Section 2.1.14.2 Vessel Traffic page 2-873

9 (1) It should be stated that based on past casualty data, the Los Angeles/Long Beach Harbors were listed twentieth in order of need for a Vessel Traffic System on a priority list of twenty-two U. S. ports. At this time, no projected date of operation has been established.

10 (2) It is recommended that this section include a quantified description of local and regional traffic patterns associated with commercial shipping and fishing, recreational boating, military operations and development of the Outer Continental Shelf oil and gas resources.

11 h. Attached as enclosure (1) is a list of definitions common to the maritime industry. Use of non-standard terminology should be avoided. In particular, the meaning of the term "purging", used repeatedly when discussing air quality, is not clear in light of the suggested definitions attached. If "purging" is understood to be a deliberate introduction of fresh air to the tank by driving out hydrocarbons compelling the tank to enter the explosive range, it would appear to create unnecessarily an unsafe condition if in proximity to oil storage and should be prohibited by the Coast Guard under authority of the Ports and Waterways Safety Act, 1972. The definition of, reason for, methods, number of tanks affected, frequency and duration of "purging" should be supplied.

R. C. HERTICA
By direction

Encl: (1) Suggested List of Definitions

R.I.P.
14 December 1976

There are a number of operations associated with oil tankers that may cause the emission of hydrocarbon to the atmosphere. These operations occur with varying frequency and in different locations. The following discussion is for the purpose of distinguishing among these operations:

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the oil residues remaining in the oil cargo tank takes place nor is there any emission of hydrocarbons. In vessels without the segregated ballast feature, operating on a return voyage to an oil loading source where there is no oily water reception facility, the ship will probably engage in tank cleaning.

Tank Cleaning -- This operation is a lengthy one and is usually carried out at sea, to prepare cargo tanks for a change of cargo, as from crude oil to a refined product, or from crude oil to grain transport. It may also be done to certain tanks in connection with ballasting. To clean the tanks, a machine which plays powerful jets of water upon the interior surfaces is lowered according to a fixed schedule from the top to the bottom of the tank over a period of several hours. As a safety measure the atmosphere in the tank may be inerted before the process begins. This action has been adopted relatively recently because of unexplained explosions which occurred from six or seven years ago in vessels engaged in this operation.

Alternatively, the hydrocarbons may be emitted by blowing in fresh air to bring the tank below the explosive limit before washing begins. The accumulation of oil and water is gathered and separated. It was once common practice to pump the accumulation overboard and this practice termed "operational pollution" has been responsible for most of the oil dumped in the sea, much more than due to tanker accidents. The procedure is now prohibited; instead, the separatinn process returns to the sea clean water and retains the slops on board. The slops are either discharged ashore or are added on top of the next load of cargo lending the name "load on top" to this practice.

Once a tank has been cleaned and "stripped" of residue, it is ready for the new, different cargo. Clean sea ballast may also be taken in permitting the vessel on loading the next cargo to discharge the clean ballast water into the harbor at the loading facility without pollution.

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The tank,after tank cleaning, is still not regarded as safe for personnel to enter as hydrocarbons are still present.

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Inerting -- In this process an oil tank is made to draw in inert gas instead of fresh air as the cargo is pumped out thereby lowering the oxygen content of the tank atmosphere making it safe from explosion or fire. The inert gas most commonly used is washed, cooled combustion exhaust drawn from the ship's boiler uptakes.

RESPONSE

Comment #1

A comprehensive analysis of this subject was not believed to be necessary. However, some details on tankers are available in Appendix A1.1.1.1, Figures A1.1.1.1-4 and A1.1.1.1-5.

Comment #2

Sections 2.1.14 and 3.1.14 have been expanded and Appendix A1.1.1.1-A has been added for discussion of vessel traffic.

Comment #3

Attachment 2 presents wind, wave, visibility, and other climatological data. As discussed in the Tanker Traffic Study, Appendix A1.1.1.1-A, weather conditions and vessel delays would result in no significant impacts.

Comment #4

Table 1.3.1-1 has been revised to reflect this comment.

Comment #5

Rerouting of any submarine cables would be done during construction, if necessary, under the direction of the affected agencies. No adverse impacts are expected.

Comment #6

Section 1.2.3.2, under Water Crossings, has been revised to reflect this comment.

Comment #7

Table 1.3.1-1 has been corrected to reflect this comment.

Comment #8

The description of climatology of the region is brief because of a general concensus that meteorological elements, such as wind speed and visibility, will play a minor role in anticipated impacts of the Alaska trade. Additional climatological information is readily available in several of the references cited in the FES. Also refer to the responses to Comment 3 above.

Comment #9

A text change to clarify this point has been made in Section 2.1.14.2, under Vessel Traffic.

Comment #10

Section 2.1.14.1 has been expanded to reflect this comment.

Comment #11

A glossary incorporating the suggested definitions has been added to the Appendices.

9.17.2 State Governmental Units

JAY S. HAMMOND
GOVERNOR

STATE OF ALASKA
OFFICE OF THE PIPELINE COORDINATOR
OFFICE 440 WEST SEVENTH AVENUE
MAILING P.O. BOX 1789 - ANCHORAGE, ALASKA 99510

January 12, 1977

Project Manager
BLM, EIS Project Office
P.O. Box 660
Los Alamitos, California 90720

Gentlemen:

As requested, the State of Alaska Pipeline Coordinator's Office is pleased to submit the attached comments concerning the Sohio Valdez - Midland, Texas crude oil Transportation System Draft Environmental Impact Statement.

Sincerely,

for C. A. Champion
State Pipeline Coordinator

CAC/fbw
attachment

BLM-EIS
Sohio Proposal
Valdez - Midland

1 1. The draft EIS indicates that Sohio is proposing to use 11 tankers to transport their 54% of 1.6 million bbl/day throughput. (BLM states they feel 14 tankers will be required). Alyeska et al has previously stated that future throughput on the Alyeska line will reach 2 million bbls/day. If, as stated, 11 tankers or even 14 are required to carry 54% of 1.6 million bbls/day then obviously additional tankers or replacement of smaller 120,000 DWT or 80,000 DWT tankers with more 165,000 DWT tankers would be required to carry 54% of 2 million bbls/day. Short of shipping the additional crude to Japan, what planning or arrangements to handle the additional tankage at Los Angeles have been made by Sohio? Another implication, particularly in light of tanker economics, is the question of whether or not 165,000 DWT tankers are the largest that will be considered for this route?

2 2. We fail to note, in the portions of the draft EIS reviewed, where any reference to slops or ballast treatment facilities have been discussed either positively or negatively.

3 3. We fail to note any reference to vapor recovery systems for the terminal facility storage system. Considerable discussion is raised with respect to the Los Angelas basin and current air quality regimes.

4 4. Some confusion is created in the discussions concerning existing and proposed harbor water depths versus figures given for vessel draft requirements. Page I-29 states that present

BLM-EIS
Sohio Proposal
Valdez - Midland

Page 2

4 water depth in the proposed area is 42 feet. and further that this is adequate for 165,000 DWT tankers. Information from Page A-56 indicates that the vessel draft for a 120,000 DWT (ecological tanker) is 54 feet. and the draft as listed on page A-57 for a 165,000 DWT tanker is 55 feet 4 inches.

5 5. With reference to page I-18 fig. 1.1.1.2-2 Long Beach port facilities, the question is raised concerning adequate additional space in the proposed tanker berthing area for future expansion.

6 6. Required construction material quanities, specifically rock fill, appears inconsistent. Page 1-26 shows a total of 1,450,000 tons of quarry and armor rock as opposed to the statement on page 1-29 which states that 2.6 million tons of rock will be required.

7 7. We find no reference to specific dockside fittings such as dry-break or so called no-drip types. These or equivalent are required under the 1972 Federal Water Quality Act Ammendments more popularly known as SPCC plans.

8 8. There does not appear to be any reference to oil spill containment or cleanup capability or even any discussion of the water. This subject is pertinent from Hinchinbrook entrance all the way to Los Angeles. Recent experience with the tanker "Argo Merchant" demonstrates that crude or heavy oils do not disperse rapidly and completely but rather are subject to surface currents for some time. Using information supplied from Fig. 2.1.5.1-2 General Circulation-North Pacific Ocean, it is shown that the Alaskan Gyral would play a significant role in

BLM-EIS
Sohio Proposal
Valdez - Midland

Page 3

8 the fate of a major spill in the North Pacific. Tar balls and heavy ends (phenols) could end up in the western Gulf of Alaska area with a potential effect on the benthic populations such as crab and shrimp. Tar balls are currently being picked up by Kodiak shrimp trawlers, probably originating in Cook Inlet.

9 9. Land Leg: We question the two pipelines under consideration. One of the current lines is a 30" line and the other a 42" line. All discussion of throughput volumes indicates 500 mbbls/day is all that will be considered. Assuming that the 42" line will be available in the early 1980's it will have a capacity for throughput of 1 mmbbls/day with existing pump stations plus adding additional pump stations. Therefore, if Sohio's needs exceed the capacity for the 30" line at a later date (when the 42" line is available) the 30" line could be converted back to a gas line. Why is the 30" line being considered at all?

10 10. Docking tugs for use at the Long Beach terminal have not been discussed. Will they be required?

11 11. More discussion is required with regard to hydrocarbon vapor control systems both dockside and on-board the tankers in the Los Angeles air basin area.

12 12. Discussion of the physical condition of the existing 30" and 42" lines appears weak. Prior to commencement of the project it should be physically determined that both lines are in good condition and capable of lasting the anticipated life of the project without having to undertake substantial repair and or replacement. It should be born in mind that gas line leaks are

12 considerably different in their environmental affects than an oil line leak.

13 13. Special construction design should be prepared and submitted for analysis and approval during the overall design review.

14 14. The construction zone width as presented on page I-49 of the draft EIS indicates a distance of 33 feet from the centerline of the pipe to the edge of the working width on the spoil side. Except for some specific soil types, a distance of 40 feet may be more reasonable. (the project proposal indicates the use of trenching machines: soils which are machine trenchable would have considerable swell and shallow angle of repose.)

15 15. Page I-51 of the proposal states that pipe stringing trucks would be transporting sections of pipe 40 to 80 feet long. Pipe trucks transporting 80 foot sections of pipe could not turn around within the proposed 100 feet working width, without turnouts. The need for turnouts should be considered in the proposal.

16 16. The welding procedures proposed on page I-52 of the draft EIS should be reviewed to determine if the pipe should be placed on skids after having only a stringer pass. Subsequent passes would require that the pipe be lifted, otherwise welding would have to be done on cribbing in the ditch. The stringer bead pass may not be strong enough to allow the pipe to be lifted without causing damage to the weld. Further, welding passes with the pipe on cribs in the ditch would be difficult and awkward causing potential problems with good welding.

17 17. Page I-64 of the draft EIS references the Colorado River

17 crossing. Figures for this crossing indicate a 30 foot width by 14 feet deep ditch cut into the river bottom. If the river bottom in this location is rock it would be feasible to blast a ditch of these dimensions. However, if the river bottom material consists of silt, sand, or gravel, the ditch top width will be much wider than 30 feet. For example, if a 6 foot bottom ditch width is assumed and 1:1 side slope is used, the top of the ditch is 34 feet wide. Assuming a 2:1 ratio would give a top ditch width of 62 feet. Experience on the Trans-Alaska Pipeline shows that the Chena River crossing required approximately 2.5:1 side slopes and the Salcha and Chatanika River crossings had side slopes of 2:1.

18 18. Page I-75 of the draft EIS states, "the condition and quality of the external coating on the existing pipeline would be ascertained and repaired as required". The proposal should be more difinitive as to how the condition of the coating will be evaluated. Also, the frequency of spot checks and the total amount of existing line that will be analyzed.

19 19. Page 110 of the draft EIS states that 3 possibilities exist for hydrostatic testing. Only possiblity #1, testing the entire line, both new and old, should be considered.

20 20. One hundred feet of R/W may not be sufficient for initial pipeline construction in some areas.

21 21. A leak dection system should be included in original plans.

22 22. There should be a discussion of marketable value of materials removed in R/W clearing, i.e. timber.

23 23. Suggest that welding standards on page I-52 be modified to Alaskan standards. (TAPS).

24 24. Question whether a burial depth providing for only 3 feet of overfill is adequate.

fbw

RESPONSE

Comment #1

Future expansion by SOHIO is beyond the scope of this ES. The proposed project calls for transporting 700,000 barrels of crude oil per day.

Comment #2

The treatment facilities at Valdez are now discussed in Section 1.1.1.1, under Sea Leg, and mitigating measures regarding ballasting have been added to Section 4.2.2 of the FES.

Comment #3

Vapor recovery is a valid alternative to the committed measures of restricting the terminal to inerted tankers having fully segregated ballast (see Section 4.2.2). Because these measures are committed, vapor recovery as an alternative is omitted.

Comment #4

Water depth figures have been made consistent throughout the FES.

Comment #5

See response to Comment 1 above.

Comment #6

This has been corrected in Section 1.2.2.1, under Dredging.

Comment #7

This is the responsibility of the Port of Long Beach and is not part of the SOHIO Project.

Comment #8

There is no oil spill contingency plan being prepared for the Sea Leg route at this time.

Comment #9

The natural gas lines that are proposed for conversion are 30 inches or less in diameter. All new construction is being overdesigned for possible expansion of the system at a later date. Such expansion would require a new environmental evaluation as discussed in the text. However, should the system be expanded, the converted 30-inch line would continue to be used to transport oil.

Comment #10

A discussion of tugboats has been added to Section 1.1.1.1, under Sea Leg, of the FES.

Comment #11

See response to Comment 3 above. Appendix A1.1.1.1 describes tanker inert gas systems. Tanker systems having equivalent effectiveness are allowed by the mitigating measure (Section 4.2.2). Catalytic oxidation and similar approaches are not discussed as none has yet been proposed.

Comment #12

The physical condition of the existing pipelines is described in Appendix A1.0: Sections 1C.3.22, Existing Pipeline Characteristics; 1.0, General; 7.0, Pipe Wall Thickness; and 8.0, Pipeline Stresses.

Comment #13

Such analysis and review is expected to occur.

Comment #14

This width was proposed by the applicant. It was considered adequate for most areas. Where terrain or soil conditions required it, the width would need to be adjusted accordingly.

Comment #15

Section 1.2.3.2, under Hauling and Stringing Line Pipe, has been revised to reflect this comment.

Comment #16

No further information was available on this subject, and no text changes were made.

Comment #17

This has been corrected in the text in Section 1.2.3.2, under Pipeline-System Construction, Section by Section.

Comment #18

The testing of the pipe coating is outlined in Section 1.2.3.2, under Protective Coating.

Comment #19

A revised hydrostatic test plan is described in Section 1.2.3.2, under Actions Following Construction, and in Appendix 1.2.3.2. All new pipeline and major segments of old line would be tested. A waiver would be requested on those portions of the existing line that have been tested recently.

Comment #20

See response to Comment 14 above.

Comment #21

A mitigating measure has been revised in Section 4.1.3 to require the best available leak detection system.

Comment #22

No commercially valuable timber will be encountered along the pipeline route. The value of rangeland vegetation to be removed by the proposed new construction has been estimated in animal unit months (AUM).

Comment #23

Any standards above and beyond those required by ICC regulations were not considered.

Comment #24

The pipe will be buried with a minimum of 3 feet of coverage; however, it may vary and be buried deeper than that depending upon conditions as construction proceeds.

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

OFFICE OF THE GOVERNOR

STATE POLICY DEVELOPMENT AND PLANNING

POUCH AD - JUNEAU 99811
PHONE 465-3512

February 10, 1977

Mr. Charles R. Tulloss
Project Manager
Bureau of Land Management
SOHIO EIS Project
P. O. Box 660
Los Alamitos, California 90720

Subject: SOHIO Crude Oil
Transportation System
DEIS
State I.O. No. 76122901

Oear Mr. Tulloas:

Attached for your review are the State of Alaska'a comments on the subject proposal. Specific comments previously forwarded to you by the Office of the Pipeline Coordinator may be considered as part of our official statement.

We feel strongly that the isaues raised in our review must be considered in the final statement and anticipate your concurrence with thia view.

Sincerely,

Robert E. LeRescher
Director

The State of Alaska's Commenta
on
Oraft Environmental Impact Statement
Crude Oil Transportation System:
Valdez, Alaaka to Midland, Texas
(As Proposed by Sohio Transportation Company)

The State of Alaska shares an interest in similar to Sohio's in aeeing that Alaska North Slope crude oil reachea the U.S. market in the most cost-effective manner possible in order to best protect the income to Alaakan residents. Equal to thia economic interest, however, ia the State's commitment to protect its marine and coastal environment. To assure that the proper balance of economic and environmental concerns are considered, the State haa taken the ongoing view that all energy-related and other development projects must be thoroughly analyzed for all impacts. It is this kind of full analyais that is lacking in the OEIS. The DEIS fails to adequately outline the full range of marketing alternatives and environmental protection options for the sea leg of the proposal.

SUMMARY OF SOHIO PROPOSAL COMPONENTS OIRECTLY IMPACTING THE STATE OF ALASKA

The Standard Oil Company of Ohio (Sohio) has proposed movement of North Slope crude oil by tanker and pipeline to the markets of the Midwest. Sohio will empioy the use of 11 to 14 tankahips in the 87,000 to 165,000 deadweight ton (OWT) class in the movement of the oil from the Port of Valdez.

According to the company, seven of the ships are to be fitted with double bottoma aa an unrequired, added aafety measure; and four ahipa in the 165,000 OWT class being built at the Avondale Shipyards, New Orleans, Louisiana, will be built with segregated ballaat aystems to lessen oil outflows due to groundings or other maritime accidenta. All the ships will be fitted with LORAN C navigational equipment and colliaion avoidance radar. The U.S. flagships will carry the Sohio and British Petroleum Company ahare of crude oil from the trana-Alaska pipeline project, approximately 600,000 barrels per day. To deliver thia oil south, Sohio--and other oil company carrier--will move through senaitive fishery and recreation zonea in Prince William Sound. Included in the marine resourcea within the sound and Gulf of Alaska are king, tanner and dunganess crab, pink and red aalmon, herring, eight species of endangered whales, and seven species of endangered birda.

The DEIS indicates that the Sohio project is conaidered the most environmentally aound and economic of several alternative propoaala for North Slope crude delivery. In addition, the OEIS states that tanker risks could be expected to increase if greater numbera of ahipa must be employed to land the oil in amaller West Coast ports or in the Gulf of Mexico via the Panama Canal route. A tanker route around Cape Horn is viewed as coat-ineffective and more navigationally hazardoua.

DEFICIENCIES IN THE OEIS

A. The draft EIS lacks a aubstantive analysis of other alternatives available in the event there is no overland distribution of Alaska crude from the West Coaat.

On pages 8-1, 8-12, and 8-13, the DEIS addresses cursorily two additional alternatives to deal with an anticipated West Coast crude surplus of 600,000 barrels per day if no action or delayed action is taken on the Sohio proposal. One alternative, it says, is to delay or curtail full production of the Prudhoe Bay oilfield in order to produce a supply
1 that does not exceed West Coast demand. The other is to tranaship the oil to a foreign nation--auch as Japan or Canada--in exchange for foreign crude oil landed on the East Coast. The DEIS aaya that neither alternative is considered "likely or realistic". Both, however, have a potential impact on State of Alaaka revenues from North Slope production.

The Department believes it is the clear responsibility of the Bureau of Land Management, in addressing the Sohio proposal, to analyze each of these alternatives for their economic impact and implications for environmental concerns in U.S. waters.

Without addressing the export alternative or the possibility of curtailing development, it is not possible to weigh the full benefits of and disadvantages to the specific proposal at hand. It is axiomatic that a "shut-in" alternative will result in reduced revenues to the State of Alaska; earnings of the eight major oil companies in the Alyeska Pipeline Service Company consortium; and a "lost" oil supply for the continental U.S. Further the shut-in alternative does not speak to the inability of West Coast refineries to process aignificant volumes of crude oil with the sulphur level found in Prudhoe Bay crude. Also, according to company estimates in the DEIS, the Sohio project will entail two years of construction activity. Were construction to begin today, the company would be unable to complete its project until a year after oil is produced at the 1.2 million barrel rate. With a West Coast surplus predicted at up to 600,000 barrela per day in 1978, the nation will remain faced with an interim decision on how the oil is to be marketed. The Sohio proposal presents an early opportunity to address this wider question; by congressional intent and by historical application an environmental impact statement ia the tool

used to view a significant, specific proposal in the wide arena, taking into consideration all alternatives. Stating that a "shut-in" or foreign exchange are "not likely or realistic" is not adequate reason for failing to address those alternatives.

2 B. The DEIS fails to address the Full Range of Methods to Assure the Safe Operation of Tank Vessels.

The State of Alaska's position on increased tanker safety standards has been well articulated and is predicated on the conviction that marine resources should not be jeopardized by the employment of vessels that do not carry all possible safety features. The possibility of even an interim export of Alaskan oil increases the chance that even existing U.S. tanker safety standards will not apply. The standards presently apply only to U.S. - constucted ships, manned by domestic crews sailing between U.S. ports. The performance of tankers fitted with inadequate safety features has been graphically illustrated by nine groundings and accidents near U.S. shores since December. These accidents are unique only in the attention they have received. The State of Alaska believes it to be the obligation of all levels of government to assure, to the maximum extent possible, that such accidents do not jeopardize one resource for the sake of another.

The DEIS makes numerous references in Chapter 5 on the likelihood of a spill occuring and cites specific areas--Prince William Sound, the Copper River Basin, Port Valdez and Bying Sound--in which a spill would result in major environmental damage. Throughout the discussion in Chapter 5, the DEIS characterizes oil spills as an adverse impact of the project that cannot be avoided. Later, in Chapter 7, the DEIS states that certain animal and plant species will be "irreversibly lost for the life (25-30 year's) of the project if they are eliminated or reduced by chronic or accidental oil spills or other pollution." Specifically, the statement refers to crab species, salmon, and herring-eggs-on kelp fisheries in the Prince Willim Sound-Port
2 Valdez leg of the ocean vessel route. The discussion of spill unavoidability in Chapter 5 underscores the serious implications of the effects discussed in Chapter 7. But in spite of the consequences, the DEIS fails to discuss (in Chapter 4) mitigating environmental damage with the employment of improved tanker safety standards.

The vessels to be used by Sohio are being built with safety features far superior to those that now exist on most vessels five years or older. But the vessels Sohio will employ in the Alaska trade still do not all meet the highest standards currently required in the U.S., even though Congress' authorization of the trans-Alaska Pipeline Act was the major impetus for implementing tanker safety standards. A good example of this concerns the Sohio contract awarded the Avondale Shipyards for construction of six 165,000 DWT vessels on December 30, 1974. This was one day before the U.S. Coast Guard implemented requirements for segregated ballast systems on all newly constructed tank vessels. On January 8, 1976, the Coast Guard implemented further segregated ballast regulations that required additional decompartmentalization in tanks carrying oil. The further regulations were implemented as an added safeguard to reduce the possibility of large oil outflows in the event the hull of a vessel is pierced. The Sohio vessels are not required to be built to this standard, however, because the further standards exempt those vessels "constructed under a contract awarded before January 8, 1976" (Chapter I, Title 33, CFR 157.08). Other companies using tankers that were under construction prior to December 31, 1974, and delivered prior to December, 1977, will not even be required to employ tankers with segregated ballast systems.

It is recognized that implementation and enforcement of tanker standards is not within the purview of the BLM, but it is within its purview to require an analysis of the alternative measures available for avoiding oil spills.
2 Obviously one alternative is to require the "state of the art" tanker safety features and a discussion of what this would do to lessen the risk of oil spills.

Recommendations

The intent of the Environmental Impact Statement review process is to provide the full range of alternatives, effects and options for a given action that will significantly affect the human environment. Without this full exploration of alternatives and protective measures, an environmental impact statement is not a fully useful tool for making decisions, nor is it an accurate portrayal of the anticipated result of those decisions. Because of this need, the State of Alaska strongly recommends that the final environmental impact statement for the Sohio project include:

1. An analysis of the impacts and implications resulting from a partial shut-in of the Prudhoe Bay oilfield until
1 a distribution system is in place on the West Coast.

2. An analysis of the impacts and implications resulting from an export of Alaska oil in an exchange program with a foreign nation.

2 3. An assessment of increased protection to coastal communities and ecosystems resulting from implementation of

2 the incremental and full range or technologically available tanker safety features.

RESPONSE

Comment #1

Chapter 8 has been revised to include a limited discussion of the economic impact on the state of Alaska of delaying or curtailing Prudhoe Bay production. Shipment of Prudhoe Bay crude oil to a foreign nation in exchange for foreign crude off-loaded on the East Coast is also given limited discussion. As presented in Chapter 8 of the FES, there are several alternatives for shipping Prudhoe Bay crude oil that is surplus to West Coast needs to eastern U.S. markets which are not dependent on construction of a pipeline distribution system. Thus, the all-water route alternatives are included under the No Action and Delayed Action alternatives. No-action or delayed action on the SOHIO proposed Long Beach terminal and pipeline to Midland, Texas, does not require a delay or curtailment of Prudhoe Bay production or sale to or exchange with a foreign nation.

Comment #2

Discussions in the FES on tanker operations and safety features have been revised and expanded to reflect new data available since the DES was printed (see Chapter 4, Appendices A1.1.1.1 and A1.1.1.1-A). However, only those mitigating measures committed to by the applicant or permitting agencies have been utilized in the evaluation of impacts.

AZ-189

COVER SHEET for FEDERAL GRANT APPLICATION/AWARD NOTIFICATION
ARIZONA

1 APPLICATION DATE: yr mo day

ITEMS 1-31 TO BE COMPLETED BY APPLICANT OR CLEARINGHOUSE DEPENDING UPON STATE PROCEDURES

2 APPLICANT: Bureau of Land Management, California State Office

4 ADDRESS: Street or P. O. Box: 2800 Cottage Way

5 CITY: Sacramento

6 COUNTY:

7 STATE: CA

8 ZIP CODE: 95825

9 PROJECT TITLE: Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (As Proposed by SOHIO Transportation Company) - Draft EIS

10 TYPE OF ACTION: [X] Grant [ ] Loan [ ] Insurance [ ] Modification [ ] Continuation [ ] Increased Dollars [ ] Decreased Dollars [ ] Increased Duration [ ] Decreased Duration [ ] Other (Explain Elsewhere) [ ] Cancellation

11 REQUESTED FUND START

12 FUNDS DURATION

13 EST. PROJECT START

14 EST. PROJECT DURATION

15 APPLICANT TYPE: A. State; B. Interstate; C. City; D. County; E. School District; F. Special Purpose District; G. Special Unit; H. Community Action Agency; I. Regional Organization; J. Indian; K. Other

16 BRIEF TITLE OF APPLICANT'S PROJECT: Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (As Proposed by SOHIO Transportation Company) - Draft EIS

18 PROJECT ABSTRACT: Transport shipment of up to 700,000 barrels of crude oil per day from Valdez to Long Beach, Ca., construct a marine terminal at Port of Long Beach for offloading and storage; construct new pipeline in California and Texas; and convert 1[illegible] of existing natural gas pipelines in California, Arizona, and New Mexico to crude oil transportation.

17 AREA OF PROJECT IMPACT (Indicate City, County, State, etc.): Maricopa, Pima, Yuma, Pinal, and Cochise Counties, Arizona

20 CONGRESSIONAL DISTRICT

19 Environmental Assessment Required: Yes / No

21 ELEVANT/OTHER AGENCIES TO WHICH SUBMITTED

22 STATE APPLICATION IDENTIFIER (SAI): A Z 76 80 0071

23 CLEARINGHOUSE ID: 200

24 MULTIPLE CLEARINGHOUSE: 201, 202, 204, 205, 206

25 ACTION BASED ON REVIEW OF: Notification / Application

26 A. ACTION TASKS: With Comment / Without Comment / Unfavorable

28 CLEARINGHOUSE IMPACT CODE: Yes / No

29 STATE WIDE: Yes / No

30 STATE PLAN REQUIRED: Yes / No

31 RECEIVED DATE AT CLEARINGHOUSE

32 FINAL CLEARINGHOUSE ACTION DATE: 12 02 07

ITEMS 33-38 TO BE COMPLETED BY CLEARINGHOUSE

33 a. STATE AGENCY

34 a. STATE AGENCY CONTACT: P.O. Box 800, Los Alamitos, CA 90720

35 a. STATE AGENCY CONTACT PHONE (Area Code): 213-594-[illegible]

36 a. SMSA/COUNTY/STATE

37 a. FEDERAL / STATE / LOCAL

38 CLEARINGHOUSE ID: 013 / 019 / 027 / 021 / 003

ITEMS 39-42 TO BE COMPLETED BY APPLICANT BEFORE SUBMISSION OF APPLICATION (AWARD NOTIFICATION)

39 CERTIFICATION: The applicant certifies that to the best of his knowledge and belief the above data are true and correct and filing of this form has been duly authorized by the governing body of the applicant.

40 a. NAME (Print or Type)

b. TITLE

c. SIGNATURE of Authorized Representative

d. TELEPHONE NUMBER

41 DATE MAILED TO FEDERAL/STATE AGENCY

42 NAME OF FEDERAL / STATE AGENCY TO WHICH THIS APPLICATION SUBMITTED

ITEMS 43-54 TO BE COMPLETED BY FEDERAL OFFICE EVALUATING AND RECOMMENDING ACTION ON THE APPLICATION

43 GRANT APPLICATION ID (Assigned by Federal Agency)

44 GRANTOR AGENCY

45 ORGANIZATIONAL UNIT

46 ADMINISTERING OFFICE

47 ADDRESS (Street or P. O. Box)

48 CITY

49 STATE

50 ZIP CODE

51 TELEPHONE NUMBER

ITEMS 55-65 TO BE COMPLETED BY THE FEDERAL OFFICE APPROVING THE GRANT APPLICATION

FINAL ACTION: A. Approved / B. Rejected / C. Withdrawn

FINAL DATES

56 FUNDS AVAILABLE

57 ENDING DATE

58 FEDERAL GRANT ID

59 FEDERAL FUND ACCOUNT NUMBER

60 MULTIPLE PROGRAM - LINE

FUNDS APPROVED (For Changes Show Only Amt. of Inc. (+) or Dec. (-))

60 FEDERAL AMOUNT

61 STATE SHARE

62 LOCAL SHARE

63 OTHER

64 TOTAL (60, 61, 62, 63)

65 REMARKS

TO:

John J. DeBolske, Exec. Dir.
Maricopa Ass'n of Government:
1820 W. Washington Street
Phoenix, AZ 85007

State Application Identifier (SAI): December 6, 1976 State AZ Number 76-80-0071

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's effect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

Economic Sec.
Mineral Resources
Indian Affairs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
Az. Atomic Energy Commission
Energy Programs
Att'y General - Agnew
Az. Solar Energy Ass'n

Transportation
Emergency Services
Health
Water — Region I
Power — Region II
Land
Parks — Region IV
AORCC — Region V
Revenue — Region VI

Please return this form to the clearinghouse no later than 15 working days from the date noted above. Please contact the clearinghouse if you need further information or additional time for review.

- [ ] No comment on this project
- [x] Proposal is supported as written
- [ ] Comments as indicated below

Comments: (Use additional sheets if necessary)

Reviewer's Signature: For Driggs

Date: 12/7/76

Title: STAFF

Telephone:

MARICOPA•ASSOCIATION•OF•GOVERNMENTS
1820 WEST WASHINGTON PHOENIX, ARIZONA 85007 (602) 254-6308

December 8, 1976

TO: Mr. Ken Fooks, Hohokam
Mr. Ernie Jahnke, Maricopa County
Mr. David French, MAGTPO

FROM: Clearinghouse Staff Contact: Ken Driggs

SUBJECT: Project Notification and Review

Applicant: Bureau of Land Management, California State Office

Project Title: Crude Oil Transportation System: Valdez, Alaska to Midland, Texas

State Application Identifier: 76-80-0071

MAG Log Number: 1215

A copy of an A-95 application form AZ-189 along with supporting project documentation is attached for your review and comment in accordance with requirements of OMB Circular A-95. Please review the proposal as it affects the plans and programs of your agency and register your response below. Please return ONLY THIS completed form within fifteen (15) days of your receipt of this request.

- ( ) No comment on the above project.
- (✓) Proposal is supported as written.
- ( ) Project is unfavorable. (Reason stated below)
- ( ) Comments are attached.

Please contact the Applicant and advise the Clearinghouse should you desire a conference with the Applicant, further information, or need additional time for review.

Kenneth B. Fooks
Authorized Representative

Hohokam RC&D Project
Agency

A Voluntary Association of Local Governments in Maricopa County

TO:

Dr. James Schoenwetter
Center for Environmental Studies
Department of Anthropology
Arizona State University
Tempe, AZ 85281

State Application Identifier (SAI): December 6, 1976 State AZ Number 76-80-0071

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's effect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

Economic Sec.
Mineral Resources
Indian Affairs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
Az. Atomic Energy Commission
Energy Programs
Att'y General - Agnew
Az. Solar Energy Ass'n

Transportation
Emergency Services
Health
Water — Region I
Power — Region II
Land
Parks — Region IV
AORCC — Region V
Revenue — Region VI

Please return this form to the clearinghouse no later than 15 working days from the date noted above. Please contact the clearinghouse if you need further information or additional time for review.

- [ ] No comment on this project
- [ ] Proposal is supported as written
- [x] Comments as indicated below

Comments: (Use additional sheets if necessary)

Reviewer's Signature: James Schoenwetter

Date: 20 Dec 76

Title:

Telephone:

ARIZONA STATE UNIVERSITY TEMPE, ARIZONA 85281
DEPARTMENT OF ANTHROPOLOGY

December 13, 1976

To whom it may concern:

I have reviewed the draft EIS for a Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (as proposed by SOHIO Transportation Company). The document appears to adequately address the problems of potential impacts on cultural resources (both prehistoric and historic) in Arizona. If carried out adequately, the procedures presented would probably fulfill the spirit and intent of the applicable state and federal legislation. Although these comments are not meant to be an endorsement of the project, it appears that the responsible agencies and companies will adequately address the problems of sound cultural resource management.

Donald E. Weaver, Jr.
Donald E. Weaver, Jr.
Director
Office of Cultural Resource Management

DEW:sb

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:
Mr. David Landrith, Executive Director, SEACO
118 Arizona Street
Bisbee, Arizona 85603

State Application Identifier (SAI): 76-80-0071 State AZ Number
MOR 76-332

From: Mrs. Jo Youngblood
Arizona State Clearinghouse

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's effect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

Please return this form to the clearinghouse no later than 15 working days from the date noted above. Please contact the clearinghouse if you need further information or additional time for review.

- [x] No comment on this project
- [ ] Proposal is supported as written
- [ ] Comments as indicated below

- [ ] Respond Directly to Applicant
- [x] Respond to the State Clearinghouse

Comments: (Use additional sheets if necessary)

Reviewer's Signature: [signature] Manager
Date: December 23, 1976
Title: Regional Environmental & Economic Development Planning Division
Telephone: 432-2237

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:
Dr. Suzanne Dandoy, Director
Department of Health Services
1740 West Adams Street
Phoenix, Arizona 85007

State Application Identifier (SAI): December 6, 1976 State AZ Number 76-80-0071

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's effect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

Please return this form to the clearinghouse no later than 15 working days from the date noted above. Please contact the clearinghouse if you need further information or additional time for review.

- [ ] No comment on this project
- [x] Proposal is supported as written
- [x] Comments as indicated below

Economic Sec.	Transportation	
Mineral Resources	Emergency Services	
Indian Affairs	Health	
Game & Fish	Water	Region I
Bureau of Mines	Power	Region II
Ag. & Hort.	Land	Region IV
Az. Mining Ass'n	Parks	Region V
Arid Lands Studies	AORCC	Region VI
Att'y General	Revenue	
Administration		
Education		
Environmental Studies		
Archaeological Research		
SW Minerals Exploration		
Oil & Gas Conservation Commission		
Renewable Natural Resources		
Az. Resources Information System		
Az. Atomic Energy Commission		
Energy Programs		
Att'y General - Agnew		
Az. Solar Energy Ass'n		

Comments: (Use additional sheets if necessary)

1 Since there is a potential for leaks to occur in petroleum transmission lines, the provisions of the Arizona Oil Spill Contingency Plan should be observed. This Plan was prepared and distributed by the Arizona Department of Health Services.

Reviewer's Signature: R. Bruce Scott
Date: DEC 21 1976
Title: ASSISTANT DIRECTOR, ARIZONA DEPT. OF HEALTH SERVICES, DIV. OF ENVIRONMENTAL HEALTH SERVICES
Telephone:

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:
Mr. James Warnock
Arizona Solar Energy Research Commission
1645 W. Jefferson Street
Phoenix, AZ 85007

State Application Identifier (SAI): December 6, 1976 State AZ Number 76-80-0071

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's effect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

Please return this form to the clearinghouse no later than 15 working days from the date noted above. Please contact the clearinghouse if you need further information or additional time for review.

- [ ] No comment on this project
- [ ] Proposal is supported as written
- [ ] Comments as indicated below

Economic Sec.	Transportation	
Mineral Resources	Emergency Services	
Indian Affairs	Health	
Game & Fish	Water	Region I
Bureau of Mines	Power	Region II
Ag. & Hort.	Land	Region IV
Az. Mining Ass'n	Parks	Region V
Arid Lands Studies	AORCC	Region VI
Att'y General	Revenue	
Administration		
Education		
Environmental Studies		
Archaeological Research		
SW Minerals Exploration		
Oil & Gas Conservation Commission		
Renewable Natural Resources		
Az. Resources Information System		
Az. Atomic Energy Commission		
Energy Programs		
Att'y General - Agnew		
Az. Solar Energy Ass'n		

Comments: (Use additional sheets if necessary)

Reviewer's Signature:
Date:
Title:
Telephone:

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:

Mr. Oscar Lyon
Chief Deputy State Engineer
Dept. of Trans.
206 S. 17th Ave
Phoenix, Ariz. 85007

State Application Identifier (SAI)

December 6, 1976 State AZ Number 76-80-0071

Economic Sec.
Mineral Resources
Indian Affairs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
Az. Atomic Energy Commission
Energy Programs
Att'y General - Agnew
Az. Solar Energy Ass'n

Transportation
Emergency Services
Health
Water Region I
Power Region II
Land Region IV
Parks
AORCC Region V
Revenue Region VI

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

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(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

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☐ No comment on this project
☐ Proposal is supported as written
☒ Comments as indicated below

Comments: (Use additional sheets if necessary)

We have reviewed the above referenced Draft EIS for the proposed Crude Oil Transportation System Valdez, Alaska to Midland, Texas. We consider this to be a well done, comprehensive study of the proposed project of transporting the crude oil from the off loading point at Long Beach California, across Arizona and New Mexico to the refineries in Texas. We note provisions are made to require necessary easement and construction permits where the project will encroach upon or cross Interstate and State highway right of way in Arizona, and understand this process is already underway.

The project should pose no adverse impact upon Arizona Department of Transportation interests and we have no projects scheduled in the current Five-Year Construction Program which would adversely affect the oil line. The provisions to minimize visual import of pumping substations and disturbed areas has merit.

We appreciate the opportunity to review and comment on this proposal.

Reviewer's Signature: Jomar E. Dorne Date: 1-11-77

Title: Manager Telephone: 261-7767

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:

Mr. L. D. McCorkindale
Agriculture & Horticultura Dept.
414 Capitol Annex West
Phoenix, Arizona 85007

State Application Identifier (SAI)

December 6, 1976 State AZ Number 76-80-0071

Economic Sec.
Mineral Resources
Indian Affairs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
Az. Atomic Energy Commission
Energy Programs
Att'y General - Agnew
Az. Solar Energy Ass'n

Transportation
Emergency Services
Health
Water Region I
Power Region II
Land Region IV
Parks
AORCC Region V
Revenue Region VI

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's effect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
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(4) additional considerations

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☐ No comment on this project
☒ Proposal is supported as written
☐ Comments as indicated below

Comments: (Use additional sheets if necessary)

There is no doubt concerning the critical need for fuel in the future of the United States

Reviewer's Signature: L. D. McCorkindale Date: 12-13-76

Title: Director Telephone: 271-4373

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:

Mr. Neal G. Trasenta
Director
Dept. of Revenue
State Capitol Bldg.
Phoenix, AZ 85007

State Application Identifier (SAI)

December 6, 1976 State AZ Number 76-80-0071

Economic Sec.
Mineral Resources
Indian Affairs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
Az. Atomic Energy Commission
Energy Programs
Att'y General - Agnew
Az. Solar Energy Ass'n

Transportation
Emergency Services
Health
Water Region I
Power Region II
Land Region IV
Parks
AORCC Region V
Revenue Region VI

From: Mrs. Jo Youngblood

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(1) the program's effect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
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(4) additional considerations

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☒ No comment on this project
☐ Proposal is supported as written
☐ Comments as indicated below

Comments: (Use additional sheets if necessary)

Reviewer's Signature: Date:

Title: Telephone:

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:

John Bannister
Oil & Gas Conservation Co.
8686 N. Central Ave. Suite 106
Phoenix, Arizona 85031

State Application Identifier (SAI)

December 6, 1976 State AZ Number 76-80-0071

Economic Sec.
Mineral Resources
Indian Affairs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
Az. Atomic Energy Commission
Energy Programs
Att'y General - Agnew
Az. Solar Energy Ass'n

Transportation
Emergency Services
Health
Water Region I
Power Region II
Land Region IV
Parks
AORCC Region V
Revenue Region VI

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's effect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

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☐ No comment on this project
☒ Proposal is supported as written
☐ Comments as indicated below

Comments: (Use additional sheets if necessary)

Reviewer's Signature: John Bannister Date: 12-13-76

Title: Ex. Sec. Telephone: 271-5161

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:

Dr. Richard T. Moore
Arizona Bureau of Mines
University of Arizona
Tucson, Arizona 85721

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's affect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

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☐ No comment on this project
☒ Proposal is supported as written
☐ Comments as indicated below

State Application Identifier (SAI)

December 6, 1976 State AZ Number 76-80-0071

Economic Sec.	Transportation	
Mineral Resources	Emergency Services	
Indian Affairs	Health	
Game & Fish	Water	Region I
Bureau of Mines	Power	Region II
Ag. & Hort.	Land	Region IV
Az. Mining Ass'n	Parks	Region V
Arid Lands Studies	AORCC	Region VI
Att'y General	Revenue	
Administration		
Education		
Environmental Studies		
Archaeological Research		
SW Minerals Exploration		
Oil & Gas Conservation Commission		
Renewable Natural Resources		
Az. Resources Information System		
Az. Atomic Energy Commission		
Energy Programs		
Att'y General - Agnew		
Az. Solar Energy Ass'n		

Comments: (Use additional sheets if necessary)

Speaking only to the portion that applies to Arizona, I feel we should support the pipeline route which should, as it will tend to give us more readily available supply of crude oil when and if the fuel crunch gets worse.

Reviewer's Signature Richard T. Moore

Date 12/13/76

Title Principal Geologist

Telephone (602) 884-2733

Project Manager, Bureau of Land Management, EIS Project Office | P.O. Box 600, Los Alamitos, CA 90720 | 596-5526 (213) FTS 585

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:

Tom Lynch, Chief
Energy Programs
Room 507
Phoenix, Arizona 85007

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's affect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

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☒ No comment on this project
☐ Proposal is supported as written
☐ Comments as indicated below

State Application Identifier (SAI)

December 6, 1976 State AZ Number 76-80-0071

Economic Sec.	Transportation	
Mineral Resources	Emergency Services	
Indian Affairs	Health	
Game & Fish	Water	Region I
Bureau of Mines	Power	Region II
Ag. & Hort.	Land	Region IV
Az. Mining Ass'n	Parks	Region V
Arid Lands Studies	AORCC	Region VI
Att'y General	Revenue	
Administration		
Education		
Environmental Studies		
Archaeological Research		
SW Minerals Exploration		
Oil & Gas Conservation Commission		
Renewable Natural Resources		
Az. Resources Information System		
Az. Atomic Energy Commission		
Energy Programs		
Att'y General - Agnew		
Az. Solar Energy Ass'n		

Comments: (Use additional sheets if necessary)

Reviewer's Signature T Lynch

Date 12-9-76

Title Chief, energy programs

Telephone 271-3303

Project Manager, Bureau of Land Management, EIS Project Office | P.O. Box 600, Los Alamitos, CA 90720 | 596-5526 (213) FTS 585

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:

Mr. Clinton M. Pattea
Executive Secretary
Indian Affairs Commission
1645 West Jefferson St.
Phoenix, AZ 85007

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's affect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

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☒ No comment on this project
☐ Proposal is supported as written
☐ Comments as indicated below

State Application Identifier (SAI)

December 6, 1976 State AZ Number 76-80-0071

Economic Sec.	Transportation	
Mineral Resources	Emergency Services	
Indian Affairs	Health	
Game & Fish	Water	Region I
Bureau of Mines	Power	Region II
Ag. & Hort.	Land	Region IV
Az. Mining Ass'n	Parks	Region V
Arid Lands Studies	AORCC	Region VI
Att'y General	Revenue	
Administration		
Education		
Environmental Studies		
Archaeological Research		
SW Minerals Exploration		
Oil & Gas Conservation Commission		
Renewable Natural Resources		
Az. Resources Information System		
Az. Atomic Energy Commission		
Energy Programs		
Att'y General - Agnew		
Az. Solar Energy Ass'n		

Comments: (Use additional sheets if necessary)

Reviewer's Signature Clinton M. Pattea

Date 12-9-76

Title

Telephone

Project Manager, Bureau of Land Management, EIS Project Office | P.O. Box 600, Los Alamitos, CA 90720 | 596-5526 (213) FTS 585

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO:

Col. George B. Jordan, Dir.
Div. of Emergency Services
5636 East McDowell Road
Phoenix, Arizona 85008

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's affect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
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☒ Proposal is supported as written
☐ Comments as indicated below

State Application Identifier (SAI)

December 6, 1976 State AZ Number 76-80-0071

Economic Sec.	Transportation	
Mineral Resources	Emergency Services	
Indian Affairs	Health	
Game & Fish	Water	Region I
Bureau of Mines	Power	Region II
Ag. & Hort.	Land	Region IV
Az. Mining Ass'n	Parks	Region V
Arid Lands Studies	AORCC	Region VI
Att'y General	Revenue	
Administration		
Education		
Environmental Studies		
Archaeological Research		
SW Minerals Exploration		
Oil & Gas Conservation Commission		
Renewable Natural Resources		
Az. Resources Information System		
Az. Atomic Energy Commission		
Energy Programs		
Att'y General - Agnew		
Az. Solar Energy Ass'n		

Comments: (Use additional sheets if necessary)

Reviewer's Signature George B. Jordan

Date Dec 14, 1976

Title Dir of Emergency Services

Telephone 271-4671

Project Manager, Bureau of Land Management, EIS Project Office | P.O. Box 600, Los Alamitos, CA 90720 | 596-5528 (714) Ext. 247

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO: Mr. Roland H. Sharer
State Liaison Officer, AORCC
4433 N. 19th Ave., Suite 203
Phoenix, AZ 85015

State Application Identifier (SAI)
December 6, 1976 State AZ Number 76-80-0071

Economic Sec.
Mineral Resources
Indian Affairs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
Az. Atomic Energy Commission
Energy Programs
Att'y General - Agnew
Az. Solar Energy Ass'n
Transportation
Emergency Services
Health
Water
Power
Land
Parks
AORCC
Revenue
Region I
Region II
Region IV
Region V
Region VI

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's effect upon the plans and programs of your agency
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(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

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- [x] No comment on this project
- [ ] Proposal is supported as written
- [ ] Comments as indicated below

Comments: (Use additional sheets if necessary)

Reviewer's Signature: Roland H. Sharer
Title: State Liaison Officer
Date: Dec. 13, 1976
Telephone: 271-5013

Management, EIS Project Office | P.O. Box 600, Los Alamitos, CA 90720 | 596-5528 (714) Ext. 247

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO: Mr. Lyman Jackson
Dept. of Education
1535 W. Jefferson
Phoenix, Arizona 85007

State Application Identifier (SAI)
December 6, 1976 State AZ Number 76-80-0071

Economic Sec.
Mineral Resources
Indian Affairs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
Az. Atomic Energy Commission
Energy Programs
Att'y General - Agnew
Az. Solar Energy Ass'n
Transportation
Emergency Services
Health
Water
Power
Land
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Revenue
Region I
Region II
Region IV
Region V
Region VI

From: Mrs. Jo Youngblood

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- [x] No comment on this project
- [ ] Proposal is supported as written
- [ ] Comments as indicated below

Comments: (Use additional sheets if necessary)

Reviewer's Signature: Lyman Jackson
Title:
Date: 12/14/76
Telephone: 644

BALANCE OF FORM TO BE COMPLETED BY REVIEWING AGENCY

TO: Mr. Wesley E. Steiner, Eng.
State Water Commission
222 N. Central Ave., Suite 800
Phoenix, Arizona 85004

State Application Identifier (SAI)
December 6, 1976 State AZ Number 76-80-0071

Economic Sec.
Mineral Resources
Indian Affairs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
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Az. Solar Energy Ass'n
Transportation
Emergency Services
Health
Water
Power
Land
Parks
AORCC
Revenue
Region I
Region II
Region IV
Region V
Region VI

From: Mrs. Jo Youngblood

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(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

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- [x] No comment on this project
- [ ] Proposal is supported as written
- [ ] Comments as indicated below

Comments: (Use additional sheets if necessary)

Reviewer's Signature: Wesley E. Steiner
Title: Planner
Date: 12-13-76
Telephone: 258-7861

TO: Mr. Robert Jantzen, Director
Game and Fish Dept.
2222 W. Greenway
Phoenix, Arizona 85023

State Application Identifier (SAI)
December 6, 1976 State AZ Number 76-80-0071

Economic Sec.
Mineral Resources
Indian Affairs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
Az. Atomic Energy Commission
Energy Programs
Att'y General - Agnew
Az. Solar Energy Ass'n
Transportation
Emergency Services
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Land
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Revenue
Region I
Region II
Region IV
Region V
Region VI

From: Mrs. Jo Youngblood

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(3) its accord with any applicable law, order or regulation with which you are familiar
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- [ ] No comment on this project
- [ ] Proposal is supported as written
- [x] Comments as indicated below

Comments: (Use additional sheets if necessary) See attached letter

Reviewer's Signature: Bruce R. Duke
Title: Project Evaluation Specialist
Date: 12/31/76
Telephone: 942-3000

ARIZONA GAME & FISH DEPARTMENT

2222 West Greenway Road Phoenix, Arizona 85023 942-3000

December 31, 1976

Project Manager
U. S. Bureau of Land Management
Box 660
Los Alamitos, California 90720

Dear Sir:

Arizona Game and Fish Department biologists have reviewed the Draft Environmental Impact Statement pertaining to the Crude Oil Transportation System: Valdez, Alaska, to Midland, Texas, (as proposed by Sohio Transportation Company). Our Department foresees no major problems at the whole with this proposal.

Earlier, we had concerns involving the pipeline crossing of the Colorado River and new pipeline construction in western Arizona southeast of Ehrenberg. However, we worked out satisfactory adjustments with your personnel.

The pipeline would have originally crossed an important backwaters on the Colorado River. This would not be the case under the present proposal. Additionally, we requested that the new pipeline construction work southeast of Ehrenberg be done in the winter months to avoid an adverse impact on desert bighorn sheep in the project area. We feel we have come to an agreement on this problem.

There are a couple of minor errors in the DES we would like to bring to your attention. On page 663 of Chapter 2, Volume II, involving mountain ranges where desert bighorn sheep are located in Game Management Unit 41, "Eagle Trail" should read "Eagle Tail" and "Tarik" should be "Tank." Additionally, we would like to update your scientific names of the mule deer and whitetail deer on page 676. Your DES states their name is Dama virginianus. This is not completely true. The Vertebrates of Arizona by Charles H. Lowe (The University of Arizona Press, Tucson, 1964) gives the latest genus and proper species on page 259. The mule deer is Odocoileus hemionus and the white-tailed deer is Odocoileus virginianus. Dama virginianus or Odocoileus virginianus is correct only for the white-tailed deer.

We appreciate the opportunity to review and comment on this DES. Please contact us if further comments are desired.

Sincerely,

Robert A. Jantzen, Director

By: Bruce R. Duke
Project Evaluation Specialist

BRD/ljt

✓cc: Mrs. Jo Youngblood, Arizona State Clearinghouse, Phoenix, Arizona

---

ARIZONA OFFICE OF THE GOVERNOR RAUL H. CASTRO

OFFICE OF ECONOMIC PLANNING AND DEVELOPMENT

1700 West Washington • Executive Tower • Room 505 • Phoenix, Arizona 85007

February 10, 1977

Mr. Charles R. Tulloss
Project Manager,
Bureau of Land Management
California State Office
2800 Cottage Way
Sacramento, California 95825

Re: Crude Oil Transportation System:
Valdez, Alaska to Midland, Texas
(As proposed by SOHIO Transportation Company)
Draft EIS S.A.I. #76-80-0071

Dear: Mr. Tulloss,

Enclosed is a copy of a response concerning the above project which was received by us after our Signoff to you.

Sincerely,

Jo Youngblood

Mrs. Jo Youngblood, Supervisor
Arizona State Clearinghouse
JY:
Encl.

TO:

Michael A. Ramnes, Act. Dir.
Arizona State Parks Board
1688 W. Adams Room 109
Phoenix, Arizona 85007

State Application Identifier (SAI)

December 6, 1976 State AZ Number 76-80-0071

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's effect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

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☐ No comment on this project
☐ Proposal is supported as written
☐ Comments as indicated below

Economic Sec.	Transportation	
Mineral Resources	Emergency Services	
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Ag. & Hort.	Land	Region IV
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SW Minerals Exploration		
Oil & Gas Conservation Commission		
Renewable Natural Resources		
Az. Resources Information System		
Az. Atomic Energy Commission		
Energy Programs		
Att'y General - Agnew		
Az. Solar Energy Ass'n		

Comments: (Use additional sheets if necessary)

Reviewer's Signature Allen Wagner Date 2/9/77

Title Pa Pl II Telephone 271-4174

ARIZONA

OFFICE OF THE GOVERNOR
RAUL H. CASTRO

OFFICE OF
ECONOMIC PLANNING AND DEVELOPMENT

1700 West Washington • Executive Tower • Room 505 • Phoenix, Arizona 85007

February 23, 1977

Mr. Charles R. Tulloss
Project Manager
Bureau of Land Management
California State Office
2800 Cottage Way
Sacramento, California 95825

Re: Crude Oil Transportation System:
Valdez, Alaska to Midland, Texas
(As proposed by SOHIO Transportation Company)
Draft EIS S.A.I. # 76-80-0071

Dear: Mr. Tulloss,

Enclosed is a copy of a response concerning the above project which was received by us after our Signoff to you.

Sincerely,

Jo Youngblood

Mrs. Jo Youngblood, Supervisor
Arizona State Clearinghouse
JY:
Encl.

TO:

Mr. Sidney S. Goodman, Jr.
Executive Director
Central Az. Ass'n of Gov'ts
512 E. Butte Ave.
Florence, Arizona 85232

State Application Identifier (SAI)

December 6, 1976 State AZ Number 76-80-0071

From: Mrs. Jo Youngblood

This project is referred to you for review and comment. Please evaluate as to:

(1) the program's effect upon the plans and programs of your agency
(2) the importance of its contribution to State and/or areawide goals and objectives
(3) its accord with any applicable law, order or regulation with which you are familiar
(4) additional considerations

Please return this form to the clearinghouse no later than 15 working days from the date noted above. Please contact the clearinghouse if you need further information or additional time for review.

☐ No comment on this project
☒ Proposal is supported as written
☐ Comments as indicated below

Economic Sec.
Minerel Resources
Indian Affeirs
Game & Fish
Bureau of Mines
Ag. & Hort.
Az. Mining Ass'n
Arid Lands Studies
Att'y General
Administration
Education
Environmental Studies
Archaeological Research
SW Minerals Exploration
Oil & Gas Conservation Commission
Renewable Natural Resources
Az. Resources Information System
Az. Atomic Energy Commission
Energy Programs
Att'y General - Agnew
Az. Solar Energy Ass'n

Transportation
Emergency Services
Health
Water
Power
Land
Parks
AOMCC
Revenue

Region I
Region II
Region IV
Region V
Region VI

Comments: (Use additional sheets if necessary)

Reviewer's Signature Sidney S. Goodman Jr. Date 2-18-77

Title Exec Dir Telephone 868-5878

RESPONSE

Comment #1

In Section 4.1.4 a mitigating measure is committed to by the applicant to prepare an oil spill contingency plan for the pipeline route. This plan"s availability is discussed in Chapter 1, Table of Contents.

Governor
RAUL H. CASTRO

Commissioners
WILLIAM H. BEERS, President, Chairman
CHARLES F. ROBERTS, O.D., Bisbee
FRANK FERGUSON, JR., Yuma
MILTON O. EVANS, Flagstaff
C. GENE TOLLE, Phoenix

Director
ROBERT A. JANTZEN

Assistant Director (Operations)
PHIL M. COSPER

Assistant Director (Administration)
ROGER J. GRUENEWALD

ARIZONA GAME & FISH DEPARTMENT

2222 West Greenway Road Phoenix, Arizona 85023 942-3000

December 31, 1976

Project Manager
U. S. Bureau of Land Management
Box 660
Los Alamitos, California 90720

Dear Sir:

Arizona Game and Fish Department biologists have reviewed the Draft Environmental Impact Statement pertaining to the Crude Oil Transportation System: Valdez, Alaska, to Midland, Texas, (as proposed by Sohio Transportation Company). Our Department foresees no major problems on the whole with this proposal.

Earlier, we had concerns involving the pipeline crossing of the Colorado River and new pipeline construction in western Arizona southeast of Ehrenberg. However, we worked out satisfactory adjustments with your personnel.

The pipeline would have originally crossed an important backwaters on the Colorado River. This would not be the case under the present proposal. Additionally, we requested that the new pipeline construction work southeast of Ehrenberg be done in the winter months to avoid an adverse impact on desert bighorn sheep in the project area. We feel we have come to an agreement on this problem.

1 There are a couple of minor errors in the DES we would like to bring to your attention. On page 663 of Chapter 2, Volume II, involving mountain ranges where desert bighorn sheep are located in Game Management Unit 41, "Eagle Trail" should read "Eagle Tail" and "Tarik" should be "Tank." Additionally, we would like to update your scientific names of the mule deer and whitetail deer on page 676. Your DES states their name is Dama virginianus. This is not completely true. The Vertebrates of Arizona by Charles H. Lowe (The University of Arizona Press, Tucson, 1964) gives the latest genus and proper species on page 259. The mule deer is Odocoileus hemionus and the white-tailed deer is Odocoileus virginianus. Dama virginianus or Odocoileus virginianus is correct only for the white-tailed deer.

We appreciate the opportunity to review and comment on this DES. Please contact us if further comments are desired.

Sincerely,

Robert A. Jantzen, Director

Bruce R. Duke

By: Bruce R. Duke
Project Evaluation Specialist

BRD/ljt

cc: Mrs. Jo Youngblood, Arizona State Clearinghouse, Phoenix, Arizona

RESPONSE

Comment #1

Section 2.1.8 has been revised to reflect this comment.

Arizona
State Land Department

1624 WEST ADAMS
PHOENIX, ARIZONA 85007
602 271-4634

January 3, 1976

Mr. Charles R. Tulloss, Project Manager
U. S. Bureau of Land Management
EIS PROJECT OFFICE
Box 600
Los Alamitos, California 90720

Subject: EIS, Crude Oil Transportation
76-80-0071

Dear Mr. Tulloss:

The draft environmental statement, chapters 1 through 9 with maps, "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas", has been reviewed by the staff of the State Land Department's divisions of natural resources and planning.

A significant percentage of the lands within the various reaches of the route and the route's proposed support systems is comprised of state trust lands. ARS 37-108, No. 19 and ARS 37-461 "Grants of Rights of Way", are the statutes which identify the legal authority of the Land Department in relation to this project.

Your chapters on mitigation (entry, rehabilitation and maintenance) are generally in accord with the stipulations the Land Department includes in its contract agreements on conduit installation. However, this Department would request on-site representation at the start dates for the Ehrenberg and Pinal Parkway-Redington segments. We would appreciate being notified when these sites are confirmed to begin construction.

Thank you for forwarding the draft environmental statement to this Office.

Sincerely,

Andrew L. Bettwy
State Land Commissioner

Peggy Spaw

By: Peggy Spaw
Administrative Assistant

ALB:PS:fmr

cc: Office of the Governor
Clearinghouse

SOHIO
1792

ERNEST GARFIELD
CHAIRMAN

AL FARON
COMMISSIONER

BUD TIMS
COMMISSIONER

DONALD B. VANCE
EXECUTIVE SECRETARY

ARIZONA CORPORATION COMMISSION
2222 WEST BRCANTO BLVD.
PHOENIX, ARIZONA 85009

To	Initial	Date
SD		
MS		
RES		
TS		
PA		

Action by
Summary by
Return to

December 27, 1976

Mr. Ed Hastey
United States Department of the Interior
Bureau of Land Management
Federal Office Building
2800 Cottage Way
Sacramento, California 92825

Dear Mr. Hastey:

The Arizona Corporation Commission has carefully reviewed the Environmental Statements concerning the proposed conversion of El Paso's natural gas line in the state of Arizona to a crude oil line as part of the major project of transporting crude oil from Valdez, Alaska to Midland, Texas as proposed by SOHIO Transportation Company.

This Commission highly recommends that the proposed project be completed as soon as possible.

It is felt that there is minimal environmental impact in Arizona as the major portion of the line has been in use for years, and that any problems concerning the small amount of new line and new pumping facilities needed can readily be taken care of in the interest of cooperation with other states to bring this major source of Alaskan crude to market in the United States. What helps the United States also benefits Arizona.

It is to be noted that although Arizona may not receive oil from this line until a refinery is built in this state, various companies are reviewing the feasibility of constructing a refinery in this area.

Regardless of the refinery question, there are some benefits to Arizona residents.

First - The transfer of this line from a gas transmission company to an oil transportation company will reduce the cost of service to those states being served by El Paso Natural Gas Company's southern division.

Second - There will be tax advantages as the new company transmitting the oil will have a larger property value with the new pumping stations.

Third - There will be more employment, first due to construction activity and later to maintain the facilities.

Fourth - Refineries in California and Texas will have more crude available to produce oil products and gasoline, although the price of Alaskan crude will be high, at least the products will be available.

In closing, we again wish to assure you that the Arizona Corporation Commission is highly in favor of this project and if there should be any problems that we can help you overcome, please contact us.

We would also like to comment on the excellent preparation of the environmental impact statements prepared by SOHIO and your department. The statements are very thorough and comprehensive, providing a very good picture of the whole project as well as the Arizona portion.

Sincerely,

ARIZONA CORPORATION COMMISSION

Ernest Garfield, Chairman

Bud Tims, Commissioner

Jim Weeks, Commissioner

cc: Charles R. Tulloss, Project Manager

Robert Kircher, Director, Utilities Division

ARIZONA DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION
206 South Seventeenth Avenue Phoenix, Arizona 85007

RAUL H. CASTRO
Governor

WILLIAM A. ORDWAY
Director

Roadside Development Services

WILLIAM N. PRICE
State Engineer

January 24, 1977

Mr. Andrew Wenchel
Landscape Architect
U.S. Department of Interior
Bureau of Land Management
P. O. Box 660
Los Alamitos, CA 90720

Dear Mr. Wenchel:

Caron Beard of our office has reviewed your proposed treatments for the pump station site and powerline extension near the Ehrenberg Rest Area.

We wholeheartedly support your proposed relocation of the Ehrenberg pump station to minimize the impact on our Ehrenberg Rest Area, which was considered the third best rest area in the nation in 1975, in the Federal Highway Administration Roadside Beautification Competition. The rest area was designed and constructed to minimize impact on the scenic desert surroundings to give the traveling public an opportunity to rest and relax in an area uncluttered by industrial or other man-made features.

The Department of Transportation has invested approximately $900,000 in this rest area and would appreciate all efforts possible to protect the integrity of this site.

In locating rest area sites, we try to select areas that will present a natural scenic appearance to the traveling public. Since this particular site was surrounded by government owned land, we assumed that there would be no need for further easements to protect the scenic quality of the adjacent land.

We will support your efforts to minimize the visual impact and noise levels pertaining to the Ehrenberg pump station. Thank you for your concern.

Sincerely,

WM. N. PRICE
State Engineer

E. LeRoy Brady
E. LEROY BRADY, Manager
Roadside Development Services

ELB:CNB:ee

HIGHWAYS · AERONAUTICS · MOTOR VEHICLE · PUBLIC TRANSIT · ADMINISTRATIVE SERVICES · TRANSPORTATION PLANNING

DEPARTMENT OF FISH AND GAME
TESTIMONY BEFORE THE U.S. BUREAU OF LAND MANAGEMENT DRAFT EIS
CRUDE OIL TRANSPORTATION SYSTEM : VALDEZ, ALASKA TO MIDLAND TEXAS
(AS PROPOSED BY SOHIO TRANSPORTATION COMPANY) 1/

I am here representing the Department of Fish and Game and wish to provide the Department's position on the Crude Oil Transportation System: Valdez to Midland Texas (as proposed by the SOHIO Transportation Company). I also wish to offer some general comments on the EIS. It has been our pleasure to act in review capacity for this major planning and assessment effort undertaken by the Bureau of Land Management.

We believe that the construction of a southern port-of-entry and oil pipeline will be a major undertaking that can have significant environmental consequences. However, it is the Department's position regarding the SOHIO project that if a California site is chosen for the southern oil terminal, we concur with the proposal to locate the terminal in the Port of Long Beach. We believe that of all the alternative sites along the coast that were considered, the Los Angeles-Long Beach harbor complex is the best place to locate a marine oil terminal. We believe this for several reasons:

1. Adverse oil related impacts on fish and wildlife resources of the harbor area would be much less, in our opinion, than similar impacts at alternative California sites.
2. The harbor complex is already extensively developed.
3. Major petroleum facilities already exist and routine operations now cause minimal damage.
4. Any oil spills that may occur during off-loading can be quickly abated because the harbor is enclosed by a breakwater. In a sheltered harbor such as Long Beach harbor, opportunities for containment are enhanced. Our experiences with oil spills in the Los Angeles-Long Beach harbor have shown environmental damage to be minimal. Spills within the

1/ Presented by Larry Espinosa January 5, 1977 at Los Angeles, California.

harbor complex have been contained within the harbor and little, if any, oil has escaped.

We contrast the situation in enclosed harbors with problems that would occur along the open coast. The EIS clearly and correctly states that in open coastal waters waves and currents would make cleanup efforts difficult, if not impossible. We believe that this statement is well supported by the records of past oil spill situations along open coasts.

With these concepts in mind, we believe that compared to other proposed sites that are located along California's open coast, construction and operation of an oil terminal in the enclosed harbor at Long Beach could be accomplished with less impact on living fish and wildlife resources.

But even though we find the impacts upon fish and wildlife will be comparatively small in the harbor complex, we believe that the harbor does contain significant biological communities and provides important resource use opportunities. Accordingly, we believe that future development within the harbor must be accomplished with proper consideration for these living resources.

We have worked with the BLM staff as the document progressed through preparatory stages. And although we have commented earlier on certain sections of the document, we remain critical of certain aspects of the document that deal with the marine terminal and the pipeline.

1 With regard to the marine terminal, we do not agree with statements in the EIS that the amount of bottom habitat that will be lost is insignificant. The document points out that this project is part of a master plan that could conceivably result in the removal of 30% of the present water area by filling parts of the harbor. If the proposed project is considered in this context we think the consequences of a 22 acre fill as part of a fill of up to 1267 acres will certainly be significant.

1 Consequently, we think the project sponsors should acknowledge the need for mitigation and be committed to it. Substitution of rocky habitat provided by the breakwater may not be satisfactory, especially if its productivity is reduced by chronic, low level contamination with oil.

2 With regard to dredging the document states that the disposal of dredge spoils at the EPA approved 100 fathom dump site may have adverse effects upon marine organisms. We believe those effects should be mitigated where possible.

3 In another regard the EIS does not discuss the fact that Pier J now provides significant opportunity for public sportsfishing. Consequently, we think an analysis of the impacts the SOHIO project will have upon fishing access at the harbor terminal site should be made and, if the project will reduce this access, the loss should be mitigated by providing new access elsewhere in the harbor.

Turning our attention to sections in the EIS that deal with pipeline construction and the pipeline route, we found the description of the environment and of project impacts were well done for the most part. However, we think the following measures should be provided in the final EIS:

4 1. Prior to construction, the precise alignment of the pipeline should be determined and surveyed for the presence of rare and endangered species. If any are encountered, the alignment should be shifted to avoid them.

5 2. After building the pipeline, disrupted areas should be revegetated especially in desert habitats.

6 3. The project sponsor should be committed to all proposed mitigation measures. In addition, offsite compensation should be provided for pump and valve stations and for new roads constructed in sensitive areas.

4. If, for some reason, the natural gas pipeline cannot be used as planned, a supplemental EIS should be submitted for the construction of a new line.

Finally, we would like to comment on the portions of the document that discuss alternative sites for a marine terminal in California. Generally speaking, we found the descriptions of the present environmental setting and of potential environmental impacts to be discussed thoroughly. We generally concur with them. However, for the record, we wish to restate and add emphasis to three major problems that would result if the SOHIO project were not located in Long Beach:

1. We wish to re-emphasize the statements in the document about increased hazards for oil spills that will be presented by using a mono-buoy system such as that proposed for all sites along the open coast.
2. We also wish to re-emphasize portions of the draft that discuss the difficulty or impossibility of abating oil spills in open coastal waters where wind, waves and currents will frustrate cleanup efforts.
3. Most importantly, we wish to re-emphasize the serious threats posed by oil spills to sensitive environments and living resources. In central California, Morro Bay, an important estuary and wetlands system is particularly vulnerable to spilled oil. Also, populations of Pismo clams, sea otters, and several species of sea birds could suffer from oil spills. And, in southern California, kelp beds off the coast at Camp Pendleton could suffer if a marine terminal were located there instead of a sheltered harbor such as at Long Beach.

This concludes our general comments. More specific comments will be offered through the State Clearinghouse. I would like to close by saying that the Bureau's draft document is a thorough, well-written effort that is easy and interesting to read. Thank you for the opportunity to comment.

RESPONSE

Comment #1

Only projects that are directly related to and necessary for the implementation of the SOHIO proposal are evaluated in the ES. Thus, only evaluation of a 22-acre fill is considered to be within the scope of the ES.

Comment #2

Dredge spoils can indeed have adverse impacts on marine life. However, no mitigating measures have, as yet, been stipulated along with permits from the concerned permitting agencies. It is expected that the permitting process for ocean dumping will ensure that all reasonable mitigating measures will be taken.

Comment #3

Public sport fishing on Pier J is discussed under Section 2.1.12.3, under San Pedro Bay, and impacts of the project on same are discussed in Section 3.1.12.3. A mitigating measure ensuring public fishing access to Pier J has been added to the FES in Section 4.2.2.

Comment #4

Section 4.2.7 recognizes the need for a survey for Rare and Endangered species prior to construction. No text change was made.

Comment #5

Section 4.1.6 discusses revegetation of disrupted areas.

Comment #6

Comment was noted, but no text change was made.

OFFICE OF THE SECRETARY
RESOURCES BUILDING
1416 NINTH STREET
95814
(916) 445-5656

Department of Conservation
Department of Fish and Game
Department of Navigation and Ocean Development
Department of Parks and Recreation
Department of Water Resources
Department of Forestry

EDMUND G. BROWN JR.
GOVERNOR OF CALIFORNIA

Air Resources Board
Colorado River Board
San Francisco Bay Conservation and Development Commission
Solid Waste Management Board
State Lands Commission
State Reclamation Board
State Water Resources Control Board
Regional Water Quality Control Boards
Energy Resources Conservation and Development Commission
California Coastal Commission
California Conservation Corps
State Coastal Conservancy

THE RESOURCES AGENCY OF CALIFORNIA
SACRAMENTO, CALIFORNIA

FEB 2 1977

Mr. Charles R. Tulloss
Project Manager, SOHIO
Bureau of Land Management
P. O. Box 660
Los Alamitos, California 90720

Dear Mr. Tulloss:

The State of California has reviewed the "Draft Environmental Impact Statement - Crude Oil Transportation System: Valdez, Alaska to Midland, Texas" which was submitted to the Office of Planning and Research (State Clearinghouse) within the Governor's Office. This review fulfills the requirements under Part II of the U. S. Office of Management and Budget Circular A-95 and the National Environmental Quality Act of 1969.

This review was coordinated with the Departments of Conservation, Fish and Game, Parks and Recreation, Water Resources, Food and Agriculture, Health, Navigation and Ocean Development and Transportation; the State Water Resources Control Board; the San Francisco Bay Conservation and Development Commission; the California Coastal Commission; the State Energy Resources Conservation and Development Commission; the California Public Utilities Commission; the Solid Waste Management Board; the Air Resources Board; the Colorado River Board of California; the Division of State Lands; and the Governor's Office of Planning and Research.

A copy of each reviewing agency's comments is attached, with additional information provided in five appendices.

If you desire, I will make available a member of my staff to assist you in responding to the State's comments in the Final Environmental Impact Statement.

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement.

Sincerely,

Claire T. Dedrick
Secretary for Resources

Attachments

STATE COMMENTS ON SOHIO DRAFT ENVIRONMENTAL IMPACT STATEMENT

Departments of: Fish and Game
Parks and Recreation
Navigation and Ocean Development
Conservation
Division of Mines and Geology
Division of Oil and Gas
Water Resources
Health
Transportation

Air Resources Board

Energy Resources Conservation and Development Commission

California Coastal Commission

Division of State Lands

Public Utilities Commission

State of California The Resources Agency

Memorandum

To: Claire T. Dedrick
Secretary for Resources
Resources Agency
1416 Ninth Street, Room 1311
Sacramento, California 95814

Date: January 11, 1977

Attention: L. Frank Goodson, Projects Coordinator

From: Department of Fish and Game

Subject: Draft EIS, Crude Oil Transportation System : Valdez, Alaska to Midland, Texas (as proposed by SOHIO Transportation Company). SCH 76120785

After reviewing the Draft EIS for the SOHIO project, we offer the following comments concerning the Project and the EIS document. Our comments are based on the assumption that a decision has been made to locate a marine terminal and pipeline in California rather than at an alternative site outside the State.

Department Position

The position of the Department of Fish and Game is that the Los Angeles-Long Beach harbor complex is the best California location for the SOHIO project, and the location of the project elsewhere in the State should be discouraged. Our position is based on the following:

1. The harbor complex is already extensively developed.

2. Major petroleum facilities already exist in the harbor and routine operations now cause minimal damage.

3. Adverse oil related impacts on fish and wildlife resources of the harbor area would be much less, in our opinion, than similar impacts at alternative California sites.

4. Any oil spills that may result during off-loading or as a result of accidents can be more quickly abated in the harbor because the harbor is enclosed by a breakwater. In a sheltered harbor such as Long Beach harbor, opportunities for containment are enhanced.

   Our experiences with oil spills in the Los Angeles-Long Beach harbor have shown environmental damage to be minimal. Spills within the harbor complex have been contained within the harbor and little, if any, oil has escaped.

We contrast the situation in enclosed harbors with problems that would occur along the open coast. The EIS clearly and correctly states that in open coastal waters waves and currents would make cleanup efforts difficult, if not impossible. We believe that this statement is well supported by the records of past oil spill situations along open coasts.

With these concepts in mind, we believe that compared to other proposed sites that are located along California's open coast, construction and operation of an oil terminal in the enclosed harbor at Long Beach could be accomplished with less impact on living fish and wildlife resources.

But even though we find the impacts upon fish and wildlife will be comparatively small in the harbor complex, we believe that the harbor does contain significant biological communities and provides important resource use opportunities. Accordingly, we believe that future development within the harbor must be accomplished with proper consideration for these living resources.

We further believe that, of the several pipeline routes evaluated in the EIS the route proposed by SOHIO would have the least severe impacts upon the living environment. However, constructing a pipeline will have adverse impacts. Without careful planning, those impacts could be serious.

Comments on the EIS

As a whole, we think the draft EIS is a thorough, well written effort. However, although we have commented earlier to the BLM staff upon portions of the draft as it progressed through preparatory stages, we remain critical of certain aspects dealing with the proposed marine terminal and pipeline. Generally we
1 concur with the assessment of alternatives presented in Volume 8. However, we would like to echo and amplify sections on central California alternatives.

Long Beach Marine Terminal - With regard to construction activities in the Port of Long Beach, we think several topics should be better discussed.

2 1. We disagree with the statement on page 3-178 that the amount of benthic habitat that will be lost to the new breakwater is an insignificant amount. Other statements characterize the area as rich, diverse, and unspoiled compared to bottom habitat in the inner harbor (page 2-110, page 3-171). Furthermore, the document states that by year 2000, up to 30% of the present water surface in the Port of Long Beach may be displaced by land fills. The master plan published by the Port of Long Beach shows the area proposed for fill as 1267 acres. We think this will result in a significant loss of bottom habitat, and even though the first land fill will be only 21 acres, the loss should be mitigated. Substitution of rocky substrate that will be provided by the new breakwater may not be adequate because, as the document points out, chronic, low level contamination by oil spilled during routine operation may reduce long-time productivity (page 6-3). Furthermore, in the context of extensive land fills planned for the future, mitigation for loss of benthic habitat within the harbor may not be feasible. Therefore, offsite compensation should be considered.

3 2. We believe that impacts upon marine organisms resulting from the disposal of dredge spoil could be minimized to the greatest extent by using land disposal sites. However the EIS states that the material will be dumped at an EPA-approved ocean dump site (page 1-27). Our understanding is that several methods exist for the actual discharge of spoil material at a dump site. 1/ Because a large volume of material will be dumped at sea,

1/ Kob, Robert C. Y. 1971. Ocean sludge disposal by barges. Water Resources Research, 7(6):1647-1651.

3 we believe that the various methods should be reviewed by the project sponsor and that the dumping method used should have the least adverse effect upon marine life.

3. Because the present and planned facilities will be held in public ownership the document should include:

4 a. the Port of Long Beach position regarding public fishing access within the Port boundary.

5 b. existing fishing opportunity in terms of lineal feet and percentages of dockside or pier accessible to the public for fishing, and

6 c. the increase or decrease in this access, in similar terms that will result from constructing facilities for SOHIO. We believe that if the project decreases fishing access, replacement access should be provided elsewhere in the harbor.

4. We agree that construction and operation of the SOHIO project will not have any foreseeable direct impact upon California least terns in the Port of Long Beach. However we think that indirect impacts should be better documented. For instance:

7 a. oil spills during nesting season could adversely affect reproductive success,

8 b. oil spills could also affect feeding habitats for not only least terns but brown pelicans because both species use similar feeding habitats.

9 5. We think the lay reader would benefit if common names for bird families were inserted (p. 3-207 et seq) for example, larids (gulls and terns) and alcids (auks, etc.).

The Pipeline Project - The sections of the EIS that deal with the pipeline in California are well done for the most part. However, we think the following measures should be provided in the final EIS.

10 1. Prior to construction, the precise alignment of the pipeline should be determined and surveyed for the presence of rare and endangered species. If any are encountered, the alignment should be shifted to avoid them.

11 2. After building the pipeline, disrupted areas should be revegetated especially in desert habitats.

12 3. Several mitigation measures are presented in the document as being either "proposed," "under consideration" or "committed" by the project sponsors (Chapter 4). We believe the sponsor should be committed to at least all the measures listed and should implement them when the pipeline is constructed.

13 4. We do not agree that the impacts of constructing a new pipeline are adequately discussed, as is suggested on page 8-70. If, for some reason, the natural gas pipeline cannot be used as planned, we believe a supplemental EIS should be submitted for the construction of a new pipeline.

14 5. We believe a significant loss of habitat is signaled by statements on page 5-16 "New construction would cause unavoidable impacts upon vegetation communities involving the removal of vegetation within the construction right-of-way, pump station sites and power transmission line maintenance roads." We believe these losses should be mitigated and because the roads and facilities will be in constant use mitigation should probably be offsite compensation.

Alternative Sites for the Marine Terminal - We found that Section 8.0, 8.2.2 and 8.2.3 of Chapter 8 were well written and contain important factors to be considered. We wish to emphasize several statements that reinforce our position that locating a marine terminal outside of the Los Angeles-Long Beach Harbor complex should be discouraged:

1. "Use of moso buoys would involve higher risks of spills and possibly interrupted service as a result of occasional adverse weather and sea conditions and the less protected berthing situation." (Page 8-4).

15 2. In addition to the material presented in Section 8.0.4, we think that onshore facilities and connecting pipelines could severely impact sensitive upland areas. Also, nearby populations of sea otters and Pismo clams could be affected by oil spills moving either up or down the coast. Estero Bay is the most sensitive area on the central California coast considered in the EIS as a potential alternative site for a marine terminal.

16 3. Avila and Oso Flaco are briefly discussed in Section 8.0.5. After Estero Bay, Avila is the next most sensitive area because Pismo clam beds to the south and sea otter herds to the north would be affected by drifting oil spills. Careful planning and construction would be necessary to avoid impacts on wildlife habitat.

17 Oso Flaco is a less vulnerable site than Avila because sea otters and Pismo clam populations are to the north. However, oil spills could be carried northward at times when prevailing weather conditions are reversed, and effects on resources could be severe.

4. The above facts serve to emphasize that locating the SOHIO project on the central California coast will have severe unavoidable consequences. Furthermore, all three California sites are adjacent to the best known and most used Pismo clam fisheries in California. Pismo clams could suffer from oil spills and chronic, low level oil pollution. They do not have a consistent reproductive pattern. Rather, there are a few years of large reproductive success interspersed with many years of low recruitment. Therefore an oil spill in a peak reproductive year could depress population for many years afterward. On the other hand, the chronic presence of oil, or a large spill could cause the flesh of clams to have oily tastes or smells.

The sea otter is a controversial species found near all three sites and many people would consider adverse impacts on otters to be unacceptable.

The three central California sites are frequented by large numbers of sea birds that are quite vulnerable to oil. For instance, as many as 1500

brown pelicans (an endangered species) have been observed in these areas. A major oil spill could cause high mortality and significant threats to bird populations.

5. We think that Sections 8.0.6 and 8.0.7 that deal with Point Hueneme/Oxnard and Camp Pendleton respectively contain important information on their sensitivity to oil development that should be reviewed by decision makers.

6. We also wish to re-emphasize portions of the draft that discuss the difficulty or impossibility of abating oil spills in open coastal waters where wind, waves and currents can frustrate cleanup efforts.

In summary, we find that of all the alternative sites presented in the draft EIS, we believe the construction and operation of a southern marine terminal in the Los Angeles-Long Beach harbor complex will have the least consequences for living resources.

Director

State of California — The Resources Agency of California

Memorandum

To : Honorable Claire T. Dedrick
Secretary for Resources

Attention Frank Goodson

Date : JAN 6 – 1977

Subject : DEIS-Crude Oil Transportation System: Valdez, Alaska to Midland, Texas - Bureau of Land Management/SOHIO Transportation Company

From : Department of Parks and Recreation

The California State Office of Historic Preservation has reviewed the Draft Environmental Impact Statement for a Crude Oil Transportation System from Valdez, Alaska to Midland, Texas, prepared by the U. S. Department of the Interior Bureau of Land Management for the SOHIO Transportation Company.

In partial compliance with the National Historic Preservation Act of 1966, Executive Order 11593 and 36 CFR 800, the Draft Environmental Impact Statement contains an inventory of identified cultural properties located within the Port of Long Beach area and along the route of the proposed pipeline which are included in the National Register of Historic Places or recorded as California State Historic Landmarks. This listing, while substantial, does not appear to be complete. In order to assist the Bureau of Land Management in its efforts to compile a full inventory of registered cultural properties located within the undertaking's area of potential environmental impact, the Office of Historic Preservation is pleased to submit the attached list of registered cultural resources to the Bureau for consideration. 18

Some effort has been made to comply further with the legislation and regulations referenced above by generally discussing various properties which may be eligible for inclusion in the National Register of Historic Places. However, it is apparent that all properties with potential eligibility have not been identified either because ongoing surveys have not yet approached this task or because appropriate surveys have not been initiated. In addition, to this date, the Office of Historic Preservation has not participated in the eligibility evaluation process for those properties which the Draft Environment Impact Statement has designated to be potentially eligible for the National Register. This Office therefore cannot meaningfully comment on the status of these resources or those which remain to be identified.

The range of values expected within the undertaking's area of potential environmental impact is treated extensively and satisfactorily. However, this represents only one of the first requisite steps leading toward a thorough and detailed inventory of all cultural properties which this undertaking may potentially impact. Compliance with 36 CFR 800 will require a complete intensive survey of all areas within or adjacent to the boundaries of the project which may be affected directly or indirectly on a long or short-term basis. Until this has been accomplished and a comprehensive report submitted, the Office of Historic Preservation cannot provide the Bureau of Land Management with appropriate comments. 19

Honorable Claire T. Dedrick
Secretary for Resources
Page 2

The proposed mitigation measures appear to be professional and adequate. However, without reference to specific situations and specific sites, they are of limited value. It would therefore be premature to assess their adequacy in more than a very general way. Mitigation measures appropriate to the protection of specific resources should be discussed as individual instances requiring their implementation arise. 20

The discussion of the project's potential impacts on identified cultural properties is necessarily general. However, compliance with 36 CFR 800.8 and 800.4b would require a detailed consideration, in consultation with the State Historic Preservation Officer, of impacts on individual resources at the earliest stage of the planning process and prior to the commencement of construction activities. As they are discovered, currently unrecorded properties must be treated similarly.

The Office of Historic Preservation recommends that the Bureau of Land Management consider the comments and suggestions provided above at the earliest opportunity and prior to the issuance of a Final Environmental Impact Statement.

Herbert Knox
State Historic Preservation Officer

Attachment

F-Sp/1

The following list includes those properties located within or adjacent to the project's area of potential environmental impact which have been designated as California State Historic Landmarks.

Los Angeles County

881 - Site of Port Los Angeles Long Wharf
894 - S.S. Catalina
127 - Pio Pico Casa
147 - Banning Park
152 - Dominguez Ranch House
161 - Mission Viejo
169 - Drum Barracks
289 - Pomona College
372 - Palomares Adobe
380 - Diego Sepulveda House
384 - Timm's Point
385 - San Gabriel Battlefield
386 - Casa de Carrion
451 - Ortega-Vigare Adobe
514 - Pomona Power Plant
580 - Alamitos No. 1 Well
646 - Greek George Grave
664 - Heritage House
681 - Paradox Walnut Tree
718 - Site of Initial U. S. Air Meet
874 - Workmen Home

San Bernardino County

42 - San Bernardino Asistencia
43 - The Zanja
95 - Cuachama Rancheria
121 - Agua Mansa
191 - Yorba-Slaughter Adobe
617 - Fort Benson

Riverside County

303 - Rubidoux Mill
749 - Sahatapa
787 - De Anza Crossing

F-Sp/3

The following list consists of properties located within the area of the project's potential environmental impact which are included in or eligible for inclusion in the National Register of Historic Places.

Los Angeles County

Long Beach:	Los Cerritos Ranch House Puvunga Indian Village
San Pedro:	Point Fermin Lighthouse Battery Osgood-Farely
Wilmington:	Banning House Drum Barracks
Compton:	Dominguez Ranch Adobe
Lynwood:	Lynwood Pacific Electric Railroad Depot
Whittier:	Pio Pico Casa
Industry:	John Reed House John Rowland House Temple Mansion Workman Adobe Workman Family Cemetary
San Dimas:	San Dimas Hotel
Pomona:	Phillips Mansion La Casa Primera Ygnacio Palomares Adobe

San Bernardino County

Chino:	Yorba-Slaughter Adobe
Bryn Mawr:	Mill Creek-Yanja
Redlands:	A. K. Smiley Public Library

Riverside County

Banning:	Gilman Ranch House

F-Sp/2

State of California — The Resources Agency of California

Memorandum

To: Claire T. Dedrick
Secretary for Resources
The Resources Agency
1416 Ninth Street, Room 1311
Sacramento, CA 95814

Attn: L. Frank Goodson

Date: December 28, 1976

Subject: BLM EIS - Crude Oil Transportation System Valdez, Alaska to Midland, Texas (SCH 76120785)

From: Director of Navigation and Ocean Development

Having reviewed the draft EIS prepared by the Bureau of Land Management, the Department of Navigation and Ocean Development has the following comments and recommendations.

21 1. It is indicated in the Tanker Traffic Study (pp. 1-2) and in the EIS Executive Summary (p. 1-7) that the four 80,000 DWT oil tankers will not be equipped with a gas inerting system. The purpose of an inerting system is to minimize the risk of an accident caused by the ignition of hydrocarbon vapor within the cargo holds of an off-loaded tanker. However, unlike the 120,000 DWT and 165,000 DWT vessels, the smaller tankers will not have this safety device. Further, because of air quality concerns, the purging of these hydrocarbon vapors may not be permitted in port. BLM's proposed mitigation measure number 2 (Executive Summary p. IV-4) stipulates that tankers be prevented from purging in the Port of Long Beach for any reason other than emergency requirements or for safety reasons. Since these regulations will apply to all SOHIO fleet vessels whether equipped with an inerting system or not, it is possible the 80,000 DWT vessels may represent a greater safety hazard in port than the other vessels. The Final EIS should discuss this situation more fully. We recommend an explanation be provided for the absence of the inerting system on the 80,000 DWT tankers. For instance, is the reason an economic or engineering problem, and can it be resolved within the limits of financial feasibility? Although the cause of the accident is still under investigation, it should be noted that the oil tanker which exploded in the Port of Los Angeles on December 17, 1976 was not equipped with an inerting system.

22 2. The EIS would benefit from an expanded description of the SOHIO fleet. For instance, it is not clear from the draft document whether the 165,000 DWT and 80,000 DWT tankers will have double hulls, as will the 120,000 DWT vessels, to reduce the risk of an oil spill in case of a collision, ramming or grounding. The number of propellers and rudders on each vessel should be indicated. If the oil tankers are to be equipped with side or bow thrusters to aid maneuverability, such information should be incorporated into the document.

23 3. The calculations involved in computing accident and oil spill probabilities are based upon the characteristics of the SOHIO fleet. (That is, the accident probabilities reflect the absence of double hulls on all but the 120,000 DWT

23 vessels and the absence of a gas inerting system from all 80,000 DWT tankers, etc.). It might be useful to compute accident and oil spill probabilities based upon the assumption that all fleet vessels were equipped with double hulls and inerting systems. This would provide an analysis of the accident probabilities of the fleet as currently proposed in comparison with the accident probabilities that could be expected if all vessels were equipped with double hulls and inerting systems. This would permit decision makers to assess the lower accident rates and oil spill probabilities in relation to the increased cost for added tanker safety equipment.

Thank you for the opportunity to comment on the draft EIS.

MARTY MERCADO
Director

State of California — The Resources Agency

Memorandum

To: L. Frank Goodson
Project Coordinator
Resources Agency

Date: January 28, 1977

From: Department of Conservation
Division of Mines and Geology
1416 - 9th Street, Sacramento 95814

Subject: SCH 76102673 SOHIO West Coast to Mid-Continent Pipeline Project

The review of the draft EIS on this project by Roger W. Sherburne, Division Seismologist (comment No. 1), and Edward C. Sprotte, Division Petroleum Geologist (comment No. 2) are the following:

24 1. The Palos Verdes fault should be considered an active fault based on seismic data; the Palos Verdes fault should be treated as capable of generating a magnitude 7 earthquake. Because of the fault proximity, the design considerations (effective acceleration, velocity, etc.) should consider the Palos Verdes fault.

2. The recognition and evaluation of potential geologic/seismic hazards which could adversely effect the structural integrity and operational continuity of the proposed project is not considered to be complete or adequate. The Final EIS should include site specific evaluation of potential hazards in order that conservative design criteria will be developed for project construction. Potential hazards not adequately evaluated in the Draft EIS include the following:

25 1. It is proposed to dredge the harbor channel and berthing area to depths ranging from 65 feet to 82 feet. The dredged channel walls will be unconfined and subject to potential liquefaction, slumping and lateral spreading induced by seismic shaking. The statement, (p. 2-84), "The natural foundation soils below the fills or in the dredged shipping channels are expected to remain stable for both earthquake conditions" is not considered adequate in the absence of site specific evaluation.

26 2. The Palos Verdes fault zone traverses within 2 miles of the proposed port facility. The statement, (p. 2-57), "This fault is considered less active than the Newport-Inglewood fault" is not considered adequate. The Palos Verdes fault should be considered as an active fault and capable of a maximum credible seismic event of magnitude 7.0 for structural design purposes.

27 3. The proposed tank farm to be located on pier J will be placed on artificial fill overlying unconsolidated young natural sediments. As stated, (p. 2-84) these artificial hydraulic fills will almost certainly liquefy during the maximum credible earthquake. The proposal (p. 2-B5) to densify these fill materials to at least 80% or to replace the fill material with material less susceptible to liquefaction, is an inadequate mitigating procedure. A proposed tank farm designed to contain up to 3.7 million barrels of crude oil at this location should be designed to withstand potential maximum credible seismic effects.

28 4. The proposed tank farm at Dominguez Hill would be located within or in close proximity to the Newport-Inglewood structural zone. The potential for ground surface rupture along this structural zone exists; although surface rupture has not occurred within historic time, the Cherry Hill fault, which extends into the Dominguez Hill area, is identified with existing fault line scarps developed in Quaternary sediments.

29 5. It would seem appropriate for conservatism to assume a potential maximum credible seismic event of 7.5 for the Newport-Inglewood structural zone, similar to NRC criteria, rather than the 7.0 magnitude used for this draft EIS.

30 6. In the selection of design earthquakes assigned to significant faults for the determination of seismic design zones along the pipeline route, the active Palos Verdes and Cucamonga faults appear not to have been considered. The Cucamonga fault is approximately 8 miles from the proposed pipeline route and is judged capof a maximum credible seismic event of 6.5 magnitude, or greater. In the consideration of the design earthquake on the San Andreas fault, northern segment, it would seem appropriate to extend this "northern segment" southerly to the juncture with the Banning and Mission Creek fault segments rather than to limit the "northern segment" as being north of Cajon Pass.

Ferry I. Amimoto
Geologist
CEG 460, RCE 20375

APPROVED BY:

Thomas E. Gay, Jr.
Acting State Geologist
RG 2634

Approved

State of California — THE RESOURCES AGENCY OF CALIFORNIA

Memorandum

To : Mr. L. Frank Goodson, Projects Coordinator
Resources Agency, Room 1311

Date : January 12, 1977

Subject : SCH No. 76120785

From : Department of Conservation — Division of Oil and Gas
Sacramento

The Division of Oil and Gas has reviewed the Bureau of Land Management DEIS Crude Oil Distribution System: Valdez, Alaska to Midland, Texas. The following comments are for your consideration.

Page 3-393

It is stated that SOHIO's EIA and El Paso's related application to the FPC for the abandonment of the 30-inch gas pipeline would not have an impact on the natural gas supply operation to California.

The BLM agrees the statement is valid under five scenarios involving supply of gas by other sources. However, it appears that scenario 2 on page 3-394 may not be valid because of the recent FPC staff recommendation against the construction of a western leg pipeline to California.

31 With respect to the FPC recommendation, how does that effect the possible use of the El Paso gas line for east to west transportation of Alaskan gas?

Page 4-54

32 Table 4.2.7-1 lists the locations of proposed remote-control valves and it appears that most are located near fault systems and river crossings. It would seem prudent to locate additional remote-control valves, in lieu of manually operated block valves, in areas where a pipeline rupture would allow the drainage of a significant amount of oil.

M. G. Mefferd
Acting Chief
Division of Oil and Gas

Approved:

Paul Cox

State of California — The Resources Agency

Memorandum

To : L. Frank Goodson
Assistant to the Secretary,
Projects Coordinator
The Resources Agency
1416 Ninth Street
Sacramento, CA 95814

Date : January 4, 1977

File No.:

Subject : Comments on BLM-SOHIO Draft EIS

From : Department of Water Resources

We have reviewed the Draft Environmental Impact Statement on SOHIO's proposed crude oil transportation system prepared by the Bureau of Land Management. Our comments are related to identifying a possible supply of oil to fuel a state-owned oil-fired power plant.

33 It is stated in the EIS that of an initial 700,000 barrels per day of raw crude entering California by ship from Alaska a minimum of 200,000 barrels would remain in the State and 500,000 barrels would be transported east through a pipeline. However, I don't feel that the supply/demand factors that justify the transshipment of 500,000 barrels per day to the east has been adequately discussed. Before any oil is transshipped the demand for oil in California should be satisfied, and this should be demonstrated in the EIS.

34 For example, the Department of Water Resources as a part of its Long Range Energy Program is investigating the possibility of utilizing a state-owned 1,000 MW oil-fired power plant to supply energy to State Water Project pumps. To meet our projected energy requirements, this plant would be scheduled to come on line by 1983, and would consume approximately 30,000 barrels of oil daily. This possible requirement which SOHIO is aware of, and other demands and their effects on projected surpluses throughout the life of the project should be discussed.

Please include these comments in the material that the agency sends to the Bureau of Land Management.

E. J. Terhaar, Chief
Energy Division
8-485-6687

State of California — Department of Health

Memorandum

HEALTH AND WELFARE AGENCY
JAN 3 4 46 PM '77

To : Health and Welfare Agency
Attention Assistant to the
Secretary, Operations
915 Capitol Mall, Room 200
Sacramento, California 95814

Date : December 31, 1976

Subject : SCH 76120785
SOHIO Proposal

From : Kenneth Snell, Chief
Environmental Health Services Branch

The Epidemiological Studies Laboratory in the Department of Health has reviewed SCH 76120785, "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (as proposed by SOHIO Transportation Company)", and offers the following comments:

35 1. The report fails to present in its summary section the peak emissions and worst case estimates. The use of annual average values tends to minimize the impact of the project. Information on maximum values are necessary to evaluate air quality and the potential adverse health impact of the project.

36 2. The pipeline portion of this project would preclude availability of one pipeline (and possibly a second pipeline later) for natural gas transmission to the West Coast. It appears to assume that sufficient supplies of natural gas will never again be available, and present curtailment will continue. This assumption has momentous impact for air quality in the South Coast Air Basin and needs to be presented fully in this EIS.

cc: Jim Rote, Resources Agency
Alan Goodley, Air Resources Board

State of California

To: Frank Thelen Resources Agency

Business and Transportation Agency

Memorandum

To: MR. JOHN P. GRATTAN
A-95 Coordinator
Transportation Agency
1120 N Street
Sacramento, CA 95814

Date: December 27, 1976

File: A-95 REVIEW

MR. JOHN E. REEVES - District 07

From: DEPARTMENT OF TRANSPORTATION

Subject: Project Review Comments

SCH NUMBER
76120785

Draft Environmental Impact Statement
Crude Oil Transportation System
Valdez, Alaska to Midland, Texas

37 The recent explosion of a tanker in Los Angeles Harbor spotlights the need for full discussion, in this DEIS, of the safety hazards inherent in the siting of a tanker terminal in a heavily populated urban center. Special attention should be given to the synergistic effects of explosion and fire on the surrounding populated areas, on the harbor facilities, on the circulation systems and on the disaster-response capabilities of all emergency service organizations.

Any easements required for the pipeline, access roads, power lines and pump stations should be discussed with the appropriate California Transportation District - Districts 07, 08 or 11 - well in advance of permit application.

Attached is a copy of the comments submitted by District 07 on the DEIR for the SOHIO Project and which apply to the BLM's DEIS as well.

for K D Stark

JOHN E. REEVES, Chief
Environmental Planning Branch
Transportation District 07
Clearinghouse Coordinator
For information, contact George Boyle
(ATSS) 640-3785 or (213) 620-3785

GB:or
Attachment
cc: Dist. 08, 11
DOTP

MR. JOHN P. GRATTAN
A-95 Coordinator
Transportation Agency
1120 N Street
Sacramento, California 95814

November 23, 1976

A-95 Review

MR. JOHN E. REEVES - District 07

Project Review Comments

SCH NUMBER
76102673

SOHIO DEIR
Port of L.B. and PUC

The long range, cumulative, adverse impacts of continuing expansion of industrial uses of coastal land, especially for oil industry uses such as the SOHIO ventura, on the adjacent recreational land uses, are of serious concern to the California Department of Transportation. We therefore repeat the three major questions we proffered in our comments on the proposed General Plan and DEIR for the Port of Long Beach:

1) Is the need for port expansion established?

   The need for port expansion should be more fully justified in the DEIR. Is expansion appropriate in a sensitive urban air basin? A discussion of the appropriateness of port expansion at Long Beach in comparison to other locations along the coast should also be developed.

2) What will be the effect on recreational land use in coastal areas if industrial land use is expanded?

   A discussion of social and other needs in an urbanized area should be fully discussed in terms of recreational needs versus industrial needs and their resultant impacts.

3) What will be the effect on Vehicle-Miles-Travelled (VMT) and on California's energy conservation program?

   An in-depth analysis of the impact of port expansion on the land transportation system in terms of congestion, energy use and pollution should be included in the EIR.

Mr. John P. Grattan -2- November 23, 1976

There appears to be no analysis of energy requirements and use, as required by CEQA, Section 21100(c).

The proposed SOHIO crude oil facilities at Port of Long Beach are designed to receive 700,000 barrels of oil per day, 200,000 barrels for local refineries and 500,000 barrels for midwest refineries. The 200,000 barrels used locally will provide far greater local benefits than the 500,000 barrels piped to the midwest. The latter, representing 71 percent of the total flow of oil through the proposed SOHIO facilities at Long Beach, will primarily benefit the midwest and only secondarily benefit Southern California. The secondary benefits are revenues to the local area for transportation through Southern California.

This suggests a basic policy question: with limited land and water area available at the Long Beach-Los Angeles port complex, how much land and water is optimal and prudent to allocate to pass-thru shipments (e.g. oil from Alaska to midwest; unit train shipments from eastern United States to Asia) and how much to allocate to shipments of commodities (oil, LNG, containers, general cargo, etc.) for local consumption to meet Southern California residential, commercial and industrial requirements?

To provide a basis for answering this question, the D.E.I.R. should discuss the following points:

1. Total ultimate capacity of local ports (Los Angeles, Long Beach, Oxnard-Port Hueneme) at maximum development assuming: (1) all possible land created and/or converted for port use, and (2) attainment of maximum safe volume of ship traffic into, out-of, and within the ports.

2. Total port facilities (berths, land, etc.) and volume of ship traffic required in 1995 to handle import and export of all commodities required for the maximum economic well being of Southern California residents, commerce and industry.

3. Total port capacity (facilities and traffic) remaining in 1995 to handle pass-thru shipments--oil from Alaska to midwest; unit train shipments from eastern U.S. to Asia; etc. (subtract Item 2 from Item 1).

4. Usability of SOHIO facilities for handling commodities other than crude oil, should the need arise.

5. Convertibility of SOHIO facilities to other commodity handling, including cost of conversion.

Mr. John P. Grattan -3- November 23, 1976

Noise

The discussions on noise in Volume I, Part I do not indicate the noise descriptor (L_{10}, L_{DN}, etc.) used. This should be stated and the reasons for selecting that particular one should be discussed.

Original Signed By
John E. Reeves

JOHN E. REEVES, Chief
Environmental Planning Branch
Transportation District 07
Clearinghouse Coordinator
For information, contact George Boyle
(ATSS) 640-3785 or (213) 620-3785

GB:jh
Attachment
cc: DOTP
District 11
District 08

State of California

Memorandum

To : Claire T. Dedrick
Secretary for Resources
Resources Agency
1416 Ninth Street, Room 1311
Sacramento, CA 95814
Attention: L. Frank Goodson

Date : January 10, 1977

Subject: Draft Copy - Proposed Valdez/Long Beach/Midland Oil Transportation System (Sohio Project) Environmental Impact Statement 76120785

From : Air Resources Board
Harmon Wong-Woo, Chief
Stationary Source Control Division

These are our comments on the "Proposed Valdez/Long Beach/Midland Oil Transportation (Sohio Project) Draft Environmental Impact Statement." In addition, accompanying these comments is a copy of Tom Quinn's testimony to the December 16, 1976 U.S. Senate Hearing on the Sohio project and a copy of the ARB staff's preliminary analysis of the project, also presented at that hearing. Mr. Quinn's testimony serves best to summarize our concerns with the project with respect to air quality. The preliminary staff analysis is a detailed estimate of the magnitude and characteristics of air pollution from operating the proposed facility. We request that these two documents to be included with the following comments as part of our review of the Bureau of Land Management Draft Environmental Impact Statement (DEIS) on the proposed Sohio project.

General

38 1. The contention in the DEIS that purging will not occur because enforcement personnel or electronic surveillance could ensure that the inerting system on the tanker is employed during unloading is incorrect. Purging is the flushing of the cargo tanks with inert gas to remove, or reduce to low concentrations, the hydrocarbons in the storage tanks after unloading. It is undertaken both to improve safety and to allow personnel to enter the cargo tank for maintenance. Therefore, purging could be conducted either in port or at sea while in the shipping lanes south of Point Conception. It has not been demonstrated that Californian governmental agencies can adopt enforceable regulations to prohibit purging, or even that such regulations are desirable if purging will improve safety. Commitments by Sohio not to purge cannot be extended to non-Sohio tankers that would use the terminal. And finally, if the terminal were sold by Sohio, it is not clear that an undertaking by Sohio not to purge would be honored by the purchaser. Purging emissions could be as nigh as 93 tons in a 24-hour period compared to emissions of 1.4 tons per day from other sources, so the possible environmental impact is greatly understated if they are not included.

39 Chapter 4, of Section 4.2.2 indicates that mitigation measures to reduce air pollution from oil tankers may be available. The Air Resources Board is particularly interested in mitigation measures that could prevent the purging of cargo tanks, or the introduction of ballast water into cargo

39 tanks at all times when the vessels are upwind of the South Coast Air Basin, at least as far as Point Conception. The Air Resources Board is also anxious to ensure that vessels will use clean boiler fuels, such as fuel with not more than 0.25% sulfur, at all such locations.

40 The DEIS discussion is somewhat ambiguous, and appears to suggest that the California Air Resources Board has legal jurisdiction to promulgate and enforce regulations requiring such mitigation measures.

The extent of the jurisdiction of the California Air Resources Board over vessel equipment and operations affecting air quality has not, to our knowledge, been definitively resolved. If the Department of Interior concludes that the Air Resources Board has jurisdiction to promulgate and enforce such regulations, notwithstanding the Federal Ports and Waterways Safety Act, and the Interstate Commerce Clause of the Federal Constitution, then the Environmental Impact Statement should clearly explain the legal basis for this conclusion.

If the Department of Interior does not conclude that California Air Resources Board has such legal jurisdiction, then the discussion of mitigation measures should be revised to list as responsible agencies, only those Federal agencies, or state agencies, if any, that possess such legal jurisdiction.

41 2. Estimates of emissions of pollutants from tankers as they travel in the Santa Barbara Channel while approaching or departing from Long Beach should be reported in the DEIS. The direction of the prevailing winds in the Santa Barbara Channel are such that pollutants released from tankers while traveling in the Channel will flow inland to the Ventura and Los Angeles areas.

It will take a tanker traveling at 16.5 knots 7.5 hours to reach Point Conception after leaving the Port of Long Beach. During this time, a 120,000 DWT non-Sohio tanker burning 3% sulfur fuel, such as described in the DEIS, would discharge approximately 6500 pounds of sulfur dioxide and 1400 pounds of nitrogen oxides.

42 3. Volume 5 of the report to BLM by Environmental Research and Technology states that "regional and long term impact of the project would be to reduce total SO_2 levels existing in the basin as a result of tankship offloading." This statement is based on the assumption that foreign crude oil imports of up to 465,000 barrels per day will be displaced by North Slope crude oil, and that the emissions from the foreign flag ships have higher emissions than the tankers carrying North Slope crude oil. While some foreign oil used by Los Angeles refineries may be displaced by North Slope Alaskan oil, it is not at all clear at this time

42 how much oil will be displaced. Much of the foreign oil imported into Los Angeles is low-sulfur Indonesian crude which could not be displaced without an unacceptable impact on air pollution in the South Coast Air Basin. Moreover, Elk Hills and OCS crude oil may displace foreign crude. With probable changes in tanker design, it is not at all certain that tankers carrying foreign oil will have more emissions than tankers carrying North Slope oil.

The displacement-of-foreign-oil emissions-reduction argument appears to be incorrect because regulations that would limit emissions from the Sohio tankers could apply equally to foreign flag tankers and therefore there would be no reduction in emissions.

43 A mitigation measure that is not discussed in the DEIS is that of locating the terminal, say, at Morro Bay, and transporting the oil by pipeline to Redlands, thereby eliminating emissions at Long Beach.

44 4. The DEIS should estimate the power-plant emissions associated with the increased electrical demand of the project. It is probable that power that would be used by pump stations located in California would be supplied by electrical generation plants located in the South Coast Air Basin.

The most appropriate method of estimating the emissions associated with this additional demand is to assume that all plants supplying power to the facility will burn 0.5 percent sulfur fuel. This methodology was followed by Socio-Economic Systems, Inc. and Environmental Feasibility Studies, Inc., contractors to the Port of Long Beach and State Public Utilities Commission for the State EIR. The significance of including these project-related emissions is apparent: sulfur dioxide, 4663 lbs. per day; nitrogen oxides, 2534 lbs. per day; particulate matter, 273 lbs. per day; and hydrocarbons, 178 lbs. per day.

45 5. The DEIS should report emissions from ballasting into cargo tanks while tankers are in the shipping lanes south of Point Conception. The DEIS evaluates tanker ballasting emissions assuming that ballast equal to 20% of the ship's dead weight tonnage would normally be required to leave the port area. However, ballast amounting to approximately 35 percent of the ship's dead weight tonnage is normally required for safe sea passage. Therefore, ships with partially segregated ballast capacity, such as the Sohio 80,000 DWT tankers, would take the additional ballast into empty cargo tanks while the ship is in the shipping lanes south of Point Conception.

46 6. In Section 3.2.6.1 of Volume 5 of the ERT report, refering to air quality impacts from the project in the year 2000 (Phase II), no comparison of Phase I to Phase II emissions is made. We suggest that, to make this

46 comparison, a table of maximum hourly and maximum daily values, adjacent to their respective statistical frequencies of occurrences, be presented. The maximum emission values would show an increase from Phase I to Phase II as a consequence of the addition of the fourth berth and the statistical frequencies of maximum hourly and maximum daily occurrences from Phase I to Phase II should show an increase as well.

Specific

47 1. Emissions from the hotelling mode of tanker operation are excluded from the DEIS because they are judged as insignificant. While they may appear small in comparison to pumping emissions, they should still be reported.

48 2. Page 120 of Volume 5, Air Quality, paragraph 1, states that only the U. S. currently requires segregated ballast for tankers over 70,000 DWT delivered after December 31, 1977.

The Inter-Governmental Maritime Consultative Organization (IMCO) has also passed such requirements for new ships, where a new ship is defined as one for which:

(a) a contract for construction is placed after December 31, 1975; or

(b) in absence of a contract, the keel is laid or is at a similar stage of construction after June 30, 1976; or

(c) delivery is after December 31, 1979; or

(d) major conversion is undertaken.

49 3. Page 127 of Volume 5, Air Quality, Paragraph 3, concludes that some non-quantifiable impacts could be caused by unavoidable problems with project operations, such as accidental fires associated with oil spills, and that this type of emission should not cause a significant impact on suspended particulate matter levels in the South Coast Air Basin.

An oil spill fire could be oxygen deficient and would result in the release of large amounts of black smoke. A fire of this type can have severe consequences on air quality, particularly if it is accompanied with adverse meteorological conditions. Even if the spill does not become ignited, air quality will suffer greatly from the evaporation of large volumes of hydrocarbons (this same conclusion is reached on oxidant impact on page 3-126 of the report).

50 4. Page 3-123, second paragraph, third sentence, states "Recent estimates by Chicago Bridge and Iron (CBI), the manufacturer of the tanks for the proposed project, yield emission rates which are 17 to 28 percent of those predicted by the API method with the variation depending on the average oil level in the tank (CBI, 1976)."

50 It is not at all certain that the tests by CBI have shown that emission rates are 17 to 28 percent of those predicted by API formula 2517. If the amount of emissions measured during the tests of the 20-foot diameter tank at Plainfield, Illinois are compared with the amount of emissions estimated by API 2517 for the 20-foot diameter test tank, then the results would be close. CBI, to obtain the 17 to 28 percent amount, linearly extrapolated the results from the 20-foot diameter test tank to the 273-foot diameter Sohio tank. The API formula uses as exponent of 1.5 on the ratio of diameters up to 150 feet, and linearly above 150 feet. Furthermore, API 2517 formula uses a non-linear relationship on RVP. The validity of a linear extrapolation of the results from the 20-foot diameter tank has not been experimentally demonstrated. The non-linear relationship in the API formula 2517 was based on tests. Further tests are clearly required before a departure from the use of the API formula 2517 is acceptable.

Enclosures

cc: Eli Chernow
William H. Lewis, Jr.
W. Lockett (with copy of printout)

State of California — The Resources Agency of California

Memorandum

To : Claire Dedrick
Resources Agency
1416 Ninth Street
Sacramento, CA 95814

Date : January 3, 1977

From : Energy Resources Conservation and Development Commission
1111 Howe Avenue
Sacramento, 95825
- James A. Walker

Subject: COMMENTS ON THE CRUDE OIL TRANSPORTATION SYSTEM: VALDEZ, ALASKA TO MIDLAND, TEXAS DRAFT EIS, SCH NO. 76120785

Introduction

The proposed project is intended to deliver 500,000 barrels per day of sour, heavy North Slope crude oil to Midland, Texas, and 200,000 barrels daily to Los Angeles area refineries. It will be shipped via tanker from Valdez, Alaska, to the Port of Long Beach and from there through pipelines to the local refineries or to Midland. The first flows are expected in 1978. The project consists of construction of three fixed tanker berths (for tankers in the 80,000-165,000 DWT class), six floating roof storage/surge crude tanks (615,000 barrels each), and supporting facilities at Pier J in Long Beach Harbor, a new pipeline to two new floating roof tanks (615,000 barrels each) at ARCO's Hynes Terminal, 11.3 miles by a route along the Los Angeles River Flood Control Channel will also be constructed. From Hynes 200,000 barrels per day will go to local refineries and the rest via a converted gas pipeline through Redlands, California, and eastward to Midland, Texas.

Recommendations

The final impact statement should include more information on energy conservation, geology, water quality, impacts of oil spills, the socioeconomic implications, and alternatives to the proposed project.

General Comments

In general, the draft EIS is a well-written document. It is well referenced and fairly well organized. However, numerous discussions are very generalized, not referring to specific impacts, locations or events. Similarly, a few of the impacts are not put into perspective to show their relative consequences.

Specific Comments

51 Energy Conservation - The draft EIS included no discussion of measures to reduce wasteful, inefficient, or unnecessary consumption of energy by the entire project. It is evident that the marine terminal and pipeline will consume relatively large amounts of energy. It is likely that several design, construction, operation and maintenance features could be used to reduce this consumption by some amount. The final

51 EIS should identify these measures, designate which measures will be incorporated into the project and reasons why the others were eliminated.

Geology - The following areas require correction, further data, or explanations:

52 1. The marine structural geology described (pages 2-52 to 54) is wholly oriented to on-land faults, several of which veer into the ocean (Palos Verdes, Newport-Inglewood) such as shown on page 2-55. However, the continental borderlands offshore from Long Beach Harbor contain additional faults whose activity and potential for affecting the project through ground-shaking, liquefaction, seiching, or tsunami generation should not be overlooked. Data on the offshore structural setting should be included.

53 Since the Palos Verdes fault appears to cross within a mile and a half of the proposed terminal, a more complete description of it and possible sub-parallel strands as well as an indication of probable impacts from movement along these faults should be included. Details of the inshore studies of Converse and Davis and offshore studies by U.S. Geologic Survey personnel should be utilized in setting description.

54 2. A more appropriate definition of fault activity (page 2-57) should be utilized (such as that of the NRC) in describing and analyzing faults related to the project.

55 3. The proximity of the Palos Verdes fault to the port facilities should be indicated (page 2-57). As a result of its proximity a more adequate treatment of it should be made (e.g. micro-seismic analysis, etc.). The Cabrillo Fault which does rupture surface materials should also be discussed. Analysis of this fault should be included.

56 4. It appears that only two major systems are at present being considered with respect to pipeline design. Some of the minor faults indicated such as the San Jose, which exhibits as much as two feet of vertical displacement of Holocene materials, may also be of interest. Clarification of the term "significant offset" is required. Additional data with respect to past offset on those minor faults which intersect the pipeline is appropriate. Any preconstruction exploratory phases with respect to such faults should also be included. A map or maps of adequate scale which illustrate such intersections is also needed.

57 5. No indication is given of the seismic nature of the Palos Verdes fault, and little discussion of the Newport-Inglewood (page 2-59). Since these fault zones are so close to the port facility, a more detailed analysis of seismicity should be submitted.

58 6. How close to the pipeline right-of-way do various mineral resources actually exist and to what potential value? Maps should be included of potentially impactable sites. Such information is a key to evaluating impacts discussed in Chapter 3.

59 7. The statement "Although the period of accurate seismic records (1934 to 1976) represents a very short time in southern California seismic history, the frequency-magnitude relationship of earthquakes shown on Figure 2.1.3.3.1-1 is considered sufficiently accurate for the purpose of statistical analysis" (page 2-80) seems fallacious with respect to current literature. Substantiation by explanation or citation is required.

60 The above-referenced figures do not adequately reflect the seismicity potential of the harbor area, lying as it does so close to the Newport-Inglewood and Palos Verdes fault zones. Further data or analysis is required to substantiate this point.

61 8. Further analysis should be performed to determine what effects will accrue to the site from events on various faults potentially affecting the site. The statement "Because soil or structural failure depends on acceleration, duration, and period, it is not immediately obvious which earthquake will have the most severe effect at the harbor" (page 2-82) is inadequate.

62 9. Table 2.1.3.3.1-1 (page 2-82) lists the Palos Verdes fault as having a maximum credible magnitude of 6.0. Because it differs from accepted figures such as Greensfelder (1974) and the Palos Verdes is so close to the Port Facility substantiation is requested.

63 10. Liquefaction is an acknowledged problem associated with Pier J hydraulic fill soils. The proposed densification of such soils to at least 80% relative density is not compatable with the 90-95% relative densities required at other recent tank sites in the Dominguez Hills. Removal and recompaction is mentioned as a possible process for increasing the site stability. A comparison of the depth of removal feasible to that needed to create a stable site should be included as well as justification of the 80% relative density figure.

64 It is stated that the natural foundation soils in the dredged shipping channels will remain stable under two earthquake conditions (Newport-Inglewood/San Andreas). The stability of the sides of the dredged channels is questioned. Substantiation of the performance of the dredge channel sides is necessary.

65 11. Both proximal and distal sources of tsunamis should be more comprehensively treated in the EIS. The statement that vertical displacement occurs on portions of the Pacific Coast "but not off California where fault displacement is mainly horizontal" (page 2-86) is inaccurate. Vertical displacement is recognized in the Continental Borderlands and should be treated both here and elsewhere in this document.

66 12. The subject of seiching is not treated. Analysis on possible occurrence and effects should be submitted.

67 13. If rupture widths and recency of faulting are unknown at fault and proposed pipeline intersections, plans should be discussed for obtaining and utilizing this information. Where known, the information should be included. Maps indicating the detail of such intersections with specific faults should be included (page 2-87 to 90).

68 14. Strong ground-shaking analysis should include the Sierra Madre-Cucamonga fault because of its potential for a large magnitude seismic event.

69 15. A discrepancy exists in the selection of Operational Level Earthquakes (OLE) with respect to historical events (page 2-92). Analysis of the Newport-Inglewood fault zone with a maximum recorded event of 6.3M leads to a 6.25M OLE while analysis of the San Jacinto with a maximum recorded of 6.5M leads to a 6.7S OLE. Further explanation is required on selection philosophy.

70 16. A map showing the proposed crossing of the Puente Hills should be included. Commentary on present slope conditions should be included in order to evaluate impact of proposed pipeline construction.

71 17. Maps showing detail of pipeline and specific mineral resource should be included where resource is believed to be impactable. Estimates of potential resource areas affected by the pipeline should be included. Effect of preemption of resource by pipeline with respect to local economy, such as increased haulage, should be included.

72 18. Impacts of liquefaction of the terminal facility, differential settlement, induced slash effects in storage tanks, sluffing or flowage of dredge channel walls, seiching within harbor, or locally derived tsunamis are not sufficiently discussed. Description and analysis of such potential impacts are required.

73 19. Impacts deriving from faults not considered in the present analysis to have "highest potential for displacement" should be discussed in view of additional information required for Chapter 2. Volumes of oil escaping at involved crossing of "minor" faults, should ruptures occur, needs to be discussed.

74 20. The statement that "valves will be placed on either side of fault zones" (page 4-4) is misleading since other sections of the report indicate only San Andreas and San Jacinto are so included. Mitigation measures should include provision to position valves on <u>any</u> faults dependent on further geotechnical investigations of <u>all</u> active or suspected active faults intersecting the pipeline.

75 21. Effectiveness of proposed removal of liquefiable soils, etc., (page 4-14) needs substantiation.

76 22. Removal of storage tanks to inland sites as shown (page 4-15) may not minimize seismic hazard inasmuch as it is then apparently closer to the Newport-Inglewood fault than previously. Additional analysis should be included.

<u>Water Quality</u> - The following areas should be more adequately discussed:

77 1. Environmental Setting (Chapter 2) does not include data on existing water quality of San Pedro Bay. Discussion of physical characteristics (tides, currents, etc.) is also lacking.

78 2. Statement dismissing potential release of toxic materials in dredging operations (page 3-51) is not adequately supported. Release of significant amounts of Hg, Zn, Cd, and Pb, as well as oil, contained in bottom sediments poses a real threat to the bay environment.

<u>Oil Spills</u> - Information on the following should be included:

79 1. Despite considerable discussion of effects of oil spills in general, the report does not project actual impacts which would result from spills of given volumes at specific locations - e.g. San Pedro Bay, Colorado River at pipeline crossing, etc. The

80 DEIS states that no modeling of specific oil spills has been done for the tanker route off California (page 3-80). It is our

80 understanding that a "sea leg" environmental evaluation by Tetra-Tech was prepared for BLM on oil spill probabilities and trajectories. This must be distributed for comment <u>before</u> a final EIS is issued and not merely inserted in the final EIS. In addition, BLM, EPA, WDGA and OPR have prepared oil spill probability and trajectory data as part of the offshore oil/OCS leasing efforts. These should be incorporated where applicable into the EIS.

81 2. Specific measures to be enacted to mitigate the effects of spills at various locations are also inadequately treated.

<u>Socio-Economic</u>

The following areas of the socio-economic environment need further discussion:

82 1. The discussion of energy supply and demand beginning on page 2-953 states that the projected natural gas supply and demand includes the "effects of deregulation," but does not state how much would be supplied through each pipeline. It also does not indicate how California would receive Alaskan North Slope gas if, 1) an overland pipeline system without a western leg is constructed, and 2) if west Texas/eastern New Mexico gas is sent by "displacement" through the El Paso Transwestern system. The FEA Alaska Oil Disposition Study on natural gas supply should also be incorporated in the EIS. Based on these deficiencies, the EIS does not support the conclusion that the proposed project would probably not reduce the availability of natural gas to California.

83 2. On page 3-396, the DEIS notes that the average daily send out of gas may be 110% of the capacity of the remaining El Paso pipeline in 1983 under the most optimistic assumptions. This may understate the potential impact of the project on the availability of natural gas to California. The final EIS should discuss alternative methods of mitigating the impacts of this potential deficiency in capacity. Such impacts could include increased cost of natural gas to California if additional pipeline capacity needs to be constructed, or decreased air quality and reliability of supply if no additional capacity is constructed.

84 3. The DEIS does not properly put into context some of the quantified data: a) the analysis of impacts on the South Coast fisheries by hypothetical oil spills failed to place into perspective the degree of impact on the total catch; b) the terminal will provide Los Angeles and Long Beach area between $48.6-$61.5 million in direct revenue. The time frame is not made clear nor the significance of such an increase in revenue.

85 4. The DEIS does not examine indirect impacts. It mentions that there would be a possible end to the export of refined petroleum products from California to Arizona with the building of new refinery facilities at Tucson or Phoenix (page 3-391). Presumably, this means the pipeline would allow the California refinery market to be tapped, but no mention is made of any socio-economic consequences of this possible reduction in the California market.

86 5. The DEIS lacks discussion of public health effects. The only discussion is on the effects of the project on public health services. Given the recent history of tanker disasters, this seems to be an untenable deficiency.

<u>Alternatives</u>

87 1. The final EIS should discuss foreign crude oil exchanges with Japan as an alternative to the project.

88 2. Each pipeline and marine terminal alternative should be compared for their relative economic and energy costs; e.g., capital costs, costs of delivery per barrel from Alaska to Midwest refinery regions, especially Chicago, and network wellhead values.

89 3. The final EIS should address the energy consumption of the various alternatives as well as an analysis on the impact of the proposed mitigation measures, plus mitigation measures for the impact on natural gas supplies on the various alternatives.

90 4. The "no action alternative" should be expanded and incorporate foreign exchanges. This should include a discussion of intensified conservation programs as an alternative or partial alternative to the proposed project.

91 5. The final EIS should address the project's relationship with alternative energy sources, such as solar energy, as well as conservation programs.

92 6. The final EIS should discuss the feasibility of offshore siting of the terminal and identify associated costs and impacts.

Due to the limited review period and the denial of a request for an extension, the above comments are the result of only a cursory staff review. More time is needed to adequately evaluate the effects of oil spills, alternatives, energy conservation, and future impacts on natural gas supplies. In order to indicate

current Energy Commission staff concerns on these issues, two draft reports on fossil fuel issues are attached. Similarly, the Commissioners' recent resolution on LNG is attached to indicate their concerns on this related issue. The Commissioners may wish to further comment on this project at a future date.

JAMES A. WALKER
Deputy Executive Director
2-4774

RLT:mwb

Attachments

STATE OF CALIFORNIA
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CALIFORNIA COASTAL ZONE CONSERVATION COMMISSION
1540 MARKET STREET, 3rd FLOOR
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January 25, 1977

Project Manager
U.S. Department of Interior
Bureau of Land Management
EIS Project Office
P.O. Box 660
Los Alamitos, CA 90720

Reference: Draft Environmental Impact Statement
Crude Oil Transportation System
Valdez, Alaska to Midland, Texas

Dear Sire:

The Coastal Commission of the State of California (CCC) hereby submits its comments with respect to the Draft Environmental Impact Statement, Crude Oil Transportation System: Valdez, Alaska to Midland, Texas.

The comments presented herein represent the views of the Coastal Commission staff only, the State and Regional Commissions are made up of part-time Commissioners, and meet only twice monthly. The pressures of on-going coastal permit review proceedings and initiation of the Local Coastal Plan Certification Programs have precluded actual Commission review of the Draft EIS. Therefore, the California Coastal Commission's formal position on the siting of a tanker terminal and distribution system for Alaskan crude oil along the California coastline must remain that presented directly in, or inferable from, the California Coastal Act of 1976, copies of which have already been provided to your office.

The policies of the State with respect to providing port-related developments consistent with coastal protection in the port areas of the State are set forth in Chapter 8, Article 1 of the Coastal Act. The policies in this article should be given particular attention by your technical team as bearing most directly on the selection and design of the applicant's proposal. Policies specific to areas mentioned as possible alternatives to the Long Beach proposal, within the State of California, would be governed by Chapter 3 of the Coastal Act.

Scope of Study

There appears to be some discrepancy between the scope of the project as portrayed in the State's Draft Environmental Impact Report and BLM's statement. Specifics have been identified in comments from the State Public Utilities Commission, Lead Agency on the State Draft, to your project manager.

The Executive Summary volume of the DEIS also appears to have some minor inconsistencies with the main body of the statement.

It is our understanding that several supplementary studies were available for review and comment to selected institutions and individuals. In this regard, it is of utmost importance that these additional materials, particularly as they might pertain to issues the Coastal Commission will be considering during future permit evaluations, be given wide circulation, and incorporation into the final statement. Of special interest to the Coastal Commission is the six volume study prepared for the "sea-leg" portion of the proposal for the Corps. of Engineers by
93 Tetra Tech, Inc., but not included in the draft document.

It is our understanding that a substantial portion of the project's contracted work was involved in the preparation of this "supplemental" report. What distribution was this work given and who has the responsibility for the sea-leg work included in the published draft, the Corps. of Engineers or the Bureau of Land Management?

Relationship Between Project and Other California Coastal Energy Development

The Draft EIS does not place the proposed crude oil transportation activities along the California coastline in the context of other pressures for energy-related development along the coast. Of greatest significance in this regard are (a) the planned LNG traffic presently programmed for areas along the coastline which will add substantially to vessel traffic along the same routes planned for the oil tanker fleet; and (b) offshore oil development in the Santa Barbara channel and in the Southern California borderlands area. New development in the Santa Barbara channel may result in as many as 10-21 new platforms, additional service vessel traffic, and additional oil tankering and barging; further exploratory drilling in the channel will create further hazards. Some of the leases programmed for exploratory activities lie either within or between the channel shipping lanes. In the Southern California borderlands area, the leases thought most promising lie directly outside the mouth of San Pedro Harbor; lease development will have to be
94 carefully coordinated with vessel traffic planning. The BLM should present its consideration of navigational routes and navigational aid systems within this expanded context. This is of particular importance if the intent is to route the crude oil tankers through the Santa Barbara channel.

The Draft EIS presents evidence that the crude oil distribution system will substantially add to electric power requirements in the South Coast area. The same is true for at least some of the offshore oil development
95 now moving forward. The DEIS should reflect an awareness of the aggregate impacts of electric power requirements growth along the coast related to coastal energy development, and identify the potential for joint planning.

Primacy of the Safety Issue

In reviewing the "worst case" scenarios projected in the DEIS the Coastal Commission and staff developed a strong sense that if the natura and degree of risks are as subject to dispute as they indeed are; if

the "worst case" accident is as severe as described and if there are feasible siting alternatives that can altogether avoid the possibility of a disaster that could cause substantial hazard to public health or loss of life, then prudence requires protection of the public safety, even at a substantially greater cost in dollars and in adverse environmental impacts, by consideration of alternate terminal sites away from population concentrations.

The Coastal Commission staff feels strongly that since the public health issue is paramount, since the preoccupation with safety skews facility siting strategy, and since discrepancies in health risk conclusions are causing great confusion among public policy makers, it is incumbent in the BLM staff in this DEIS to contribute to the resolution of the conflict among experts, and not to add further to the problem by inadequate treatment of the public health issue.

Adequate treatment of the safety issue would include at least the following:

96 (a) a thorough analysis of the "emissions trade-off" proposal to include a complete inventory of all possible trade-offs should the Hynes Tank Farm scenario not come to pass.

97 (b) a risk analysis of several recent events such as the Sansinena explosion and fire in Los Angeles Harbor (1976); the ramming of an offshore oil platform by an oil tanker in the Gulf of Mexico (1975); the recent rash of tanker break-ups and grounding along the Atlantic Seaboard.

In conclusion, the Coastal Commission staff does not feel that the Draft EIS has sufficiently dealt with the safety and other public health related potential impacts.

Thank you for the opportunity to comment on this Draft EIS.

Sincerely,

Michael A. Dadasovich
Ports Coordinator

mr

cc State Resources Agency - James Rote
Joseph Bodovitz
Mel Carpenter
File

STATE OF CALIFORNIA

EDMUND G. BROWN JR., Governor

STATE LANDS COMMISSION

KENNETH CORY, Controller
MERVYN M. DYMALLY, Lieutenant Governor
ROY M. BELL, Director of Finance

EXECUTIVE OFFICE
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Sacramento, California 95814

INITIAL STAFF COMMENTS

SOHIO EIS (BLM)

January 1977

SOHIO EIS (BLM)
CHAPTER 1

Page	Reference		Comment
1	Paragraph 2	98	The 700,000 bbl/day figure cited herein includes Alaska's royalty share of the production. SOHIO's actual "share" will be 563,640 bbl/day. Unless BLM is certain that SOHIO will be transporting Alaska's royalty oil, this figure should be used throughout the EIS. Furthermore, since SOHIO's share is approximately 140,000 bbl/day less than the stated amount involved in the project (700,000 bbls), it is certain that ships and companies other than SOHIO's will be using the facility. This fact should obviously be discussed in the EIS.
2	Paragraph 1,2	99	According to the SOHIO proposal and the resultant EIR, the Hynes facility is to be used as the storage area and the initiating pump station, not Oominguez Hills. Which is it, and why aren't the Hynes and other "alternative" sites discussed here?
3	Paragraph 3	100	Availability of a second 30-inch gas line should be substantiated, not supposed.
4	Paragraph 3	101	If Alaskan supply is less than aggregate demand, its distribution will determine which part of the U.S. will become dependent on foreign crude, i.e., transport to the East increases the West's dependence and vice-versa.
7	Paragraph 3	102	This evaluation reflects BLM's error as stated in the comment for page 1, paragraph 2, and as such magnifies it throughout the EIS. In this light, it may be a very serious misassumption.
29	Last Paragraph	103	How can ships with a draft of 55 feet have safe clearance in 42 feet of water?
31	Storage Tanks	104	Oocument says 6 tanks on page I6 as does all other SOHIO material.
43	Paragraph 1	105	It is imperative that the "comprehensive hydrostatic test program" be required of the applicant and discussed in the EIS. Such questions such as disposal of the

-2-

Page	Reference		Comment
		105	water used, the source of such water, the means of testing (entire pipeline or segments thereof), etc. must be answered.
52	Welding	106	How will the welds be tested in the field? Will independent inspectors be used as with the TAPS line?
68	Last Paragraph	107	The use of a check valve instead of a gate valve at a stream crossing is questioned. A 30-inch or 42-inch check valve can induce high surge pressures and does not shut off as tightly as a gate valve.
73	Table 1.2.3.2-A	108	What about State Lands Commission jurisdiction?
111	Paragraph 2	109	All portions of the line should be hydrostatically tested. It would seem that it would be more important to check the old sections of the line than the new. Furthermore, a review of Appendix A1.0 shows that certain sections of the existing 30-inch gas line can be expected to have leaks from welds and corrosion pits. Reports of tests made during the period 1968-73 show a history of leaks from weld joints and from the effects of corrosion. Again, the existing gas lines should be retested hydrostatically to 1.25 times the new working pressure of the pipeline in accordance with Federal Department of Transportation regulations before placing it in service.
148	Paragraph 2	110	This paragraph should be revised to reflect existing law.
153	Last Paragraph	111	The Port Hueneme alternative would entail the conversion of an existing ARCO 20-inch gas line and thus little new pipeline would be required.
159	Paragraph 2	112	As we have maintained in comments on the State EIR, if dredge spoils from the SOHIO Project are used to extend Pier J southward, such filling is therefore a direct result of the SOHIO Project and as such must be discussed in the EIS.

SOHIO EIS (BLM)
CHAPTER 2, VOLUME I

Page	Reference		Comment
6	General Climatology	113	The statement is made that Southern California winters are wet. The winters are not wet. In the port area the average annual rainfall barely exceeds ten inches with about two-thirds occurring in the winter (exclusive of fall and spring). The total cumulative winter rainfall is ordinarily dominated by two or three storms which account for at least half of the total. Ouring more than 75% of the winter days there is no measurable rain. Therefore, no data indicate wet winters. In addition in the port area the year's lowest humidity occurs frequently during late fall - early winter "Santa Anas".
6&11	General Climatology	114	The inversion level is frequently much lower than 2,000 feet. Several studies have reported mean inversion levels over the ocean between 800 and 1,200 feet. This report does say summer inversions are strong, low, and persistent. These should be emphasized because air pollutant effects are much greater during low inversions.
10	Severe Winds	115	The standard physiographic description for the inland region east of the Southern California coast is the Los Angeles Basin, not the Great Valley of Southern California.
55	Figure 2.1.3.2.1-I	116	The "Fault Map of the Port of Long Beach" is considered to be incorrect for several reasons. The Palos Verdes fault is shown about 2 miles easterly of its actual location. The P.V. fault intersects the breakwater near the eastern side of the Angels Gate. There are several faults or a fault zone along the eastern bay that are not shown.
85	Subsidence	117	The "rebound" of previously subsided area should be discussed as such has occurred since reinjection activities began in the Wilmington Oil Field.

Page	Reference		Comment
85	Tsunamis	118	The section on tsunami hazards is incomplete. No mention is made of the May 1960 tsunami. This event originated off the coast of Chile and accompanied the largest recorded modern earthquake (co-highest with Japan 1933). The tsunami had much higher waves in Southern California than were recorded for March 1964 (described in the text). For example, Los Angeles Harbor pier 60 recorded 3.2 feet in 1964, but the 5.0 foot wave of 1960 was not mentioned. Ouring 1960, a 6.1 foot wave was recorded at Terminal Island, but the report suggests that 4 foot waves are the highest expected. But based on easily available published data, a 6 foot wave has an expected recurrence interval of 100 years at 63% risk. It is reasonable to consider using the 10% risk for a project of this magnitude - therefore higher waves.
113	2.1.4.2	119	It is noted in map 2.1.4-A on page 59 of the map volume that the pipeline route predominantly crosses areas with soils delineated as Haplargids plus Paleorthids, Torripsammento, Paleorgids and Calciorthids. What means or methods will oe used to minimize hazards characteristic of these groups?
155	Paragraph 2	120	Weather station PAPA appears to be mis-located in the text. Otherwise, it does not represent this project. (Text location 5°N 145°W).
159	Last Paragraph	121	Table 2.1.5.1.2-1 causes considerable problems in interpretation. It is described in the text as consistent with levels reported in other parts of the world's ocean. The table lists copper as 1.6 - 9.0 mg/l while the world's ocean water has only about .003 ppm copper. Zinc is listed 1.1 - 41.2 mg/l, but zinc in the world's ocean is expected to be about .01 ppm., etc., etc. for other elements. It doesn't make sense.
166	Tidal Heights	122	The maximum tidal height is given as 7.06 feet above M.L.L.W. It should be noted that other factors can cause water levels higher than the tidal level such as wind surge, low barometer, and flood runoff. These factors should be assessed.

Page	Reference		Comment
193	South Coastal Basin	123	A statement is made that Mount San Antonio, San Gorgonio and San Jacinto Peak all exceed 11,000 feet. Neither Mount San Antonio nor San Jacinto Peak exceed 11,000 feet.
259	All	124	Oata on northwestern Riverside County are not given in this report and this is a gross omission. Residents from around U. C. Riverside are notorious for making frequent smog complaints on radio and in the press. As shown in Figures 2.1.1.2-1, 2.1.1-2-2, and 2.1.1.12-3, the Los Angeles air shed and particularly from Long Beach Harbor areas also includes northwestern Riverside County.
286	Paragraph 1	125	A statement is made that "a typical wind trajectory is from Long Beach northward and then veering east toward the Pomona area". This statement disagrees with data shown on Figures 2.1.1.2-2 and 2.1.1.2-3.

SOHIO EIS (BLM)
CHAPTER 2, VOLUME 3

Page	Reference		Comment
964	Table 2.1.16.5-2	126	Isn't this table unrealistic if the price is held artificially at the same level over 14 years?
972	Table 2.1.16.5-4	127	Again, the table's figures are suspect because of the economic bench mark used--preembargo prices.
977	All	128	These figures and projections do not seem realistic in light of the anticipated leasing activities under the new adminis-tration and the experience, re: tracts sold within a sale, of BLM with Lease Sale 35.
987	Paragraph 2	129	This cost for TAPS is too low even in 1975 dollars.
1000	Table 2.1.16.5-15	130	Is OCS production more a function of acres leased or projected resource availability irrespective of acreage?
1008 et seq.	Oemand and Forecast	131	This section as well as previous price figures on foreign oil is shaky to say the least. Foreign oil is already at a price range now assigned to the late 1980s and foreign imports, according to FEA in August 1976, would reach 7+ million barrels per day in 1976 (much less what it might be in 1985 - shown as approxi-mately 6 million barrels per day in 1985 in this EIS). Unless demand falls faster than domestic production rates and inversely with price, the levels of foreign imports will continue to rise. Under current and anticipated situations, little of the information in this section, as well as the whole supply-demand discussion, appears relevant or useful.
1018	Paragraph 2	132	According to the State's Energy Commission, there will not be any electrical generat-ing units using natural gas within a short period of time. This and the con-tents of this paragraph must be reconciled.
1027	Paragraph 1	133	Upon what basis is it assumed that refineries will operate at only 86.4% of their "published" stream day capacities? Further, why do you mix up production

Page	Reference		Comment
		133	per calendar day and production per stream day? Units of production must be consistent to have validity.
1027	Last Paragraph	134	The Elk Hills assumption is unwarranted and unfounded based on actual informa-tion, sale experience and the considera-tions of disposition now under consid-eration by the Navy.
1058	Petroleum	135	Not so - SOHIO has already made commit-ments which will result in new refinery capacity in close proximity to the pro-posed pipeline route.
1063	Last Paragraph	136	Ridiculous! See April 7, 1975 issue of the Oil and Gas Journal and the State Lands Commission working paper - California and the Oisposition of Alaskan Oil and Gas for starters!
953-1068	All	137	Beyond questions as to the validity of information contained herein, there appears to be little raison d'etre for this discussion. One basic question remains - what effect, relationship or whatever, does this have to the SOHIO Project?

SOHIO EIS (&LM)
CHAPTER 3

Page	Reference		Comment
47	Table	138	Table 3.1.5.1.1-1 shows sediment chemistry of core samples. The text on P - 3 - 46 refers these samples to figure 2.1.4.1-1. This presents a problem for a reviewer trying to locate areas with bad quality sediments. The core locations are given elsewhere, figure 2.1.4.1-2, but that should be noted on P - 3 - 47, and not require a search.
		139	Table 3.1.5.1.1-1, columns 4 and 5 require more complete explanation. Do these represent percentages of the total sample excluding + (plus) water, or what?
72	Paragraph 2	140	Disagreement is made with the statement that water in oil emulsions "being more tar-like, can do more damage onshore than oil".
		141	It should be noted that the most toxic components (therefore most damaging) are the lower carbon number oils, $<C^{20}$. The problem with water in oil is that when it inevitably gets back into the water column, it may be saturated with hydrocarbons and perhaps at toxic levels.
		142	The sections on fate of oil present conflicting points of view. This probably results from different writers of different sections. The sections on effects of oil on the biosphere are well done, but the treatment on what happens to oil on the water seems to miss important factors. Oil components that are dissolved into the water are responsible for toxic effects. The text seems to suggest that dissolution of oil produces beneficial effects by sinking it. (Out of sight out of mind.)
75	Paragraph 1	143	Since the weathering factors are extremely important in relation to the viscosity of the residual oil, shouldn't these factors then be considered when modeling oil spill movement and trajectory?

-2-

Page	Reference		Comment
95	Paragraph 1	144	Will only 5% of the spills be detected by the monitoring system?
95	Table 3.1.5.2.2-1	145	The volumes of oil spilled by the project appear to be much too small in light of the time required for the necessary valves to close up to 10 minutes (83,000 barrels for longest time frame)!
113	Paragraph 2	146	The statement is made on page 3-113 that this DEIS differs significantly with the Port of Long &each and Pacific Environmental Services studies on the air quality impacts. Differences that are noted are basic assumptions, methodology and "worst case" conclusions. It would seem that this crucial issue merits further research and consultation between these experts of differing viewpoints to produce a credible, reasonable projection of the air quality that would result from the proposed action.
169	Paragraph 1	147	It appears that a field survey is necessary to substantiate any discussion hereafter.
285	Figure 3.1.10.1-1	148	The drawing appears to place the storage tanks on the proposed Pier J landfill rather than on the existing Pier J as proposed.
347	Last Paragraph	149	Port officials have stated a figure of 22-24 months for terminal completion.

SOHIO EIS (&LM)
CHAPTERS 4-9, APPENDICES

Page	Reference		Comment
4-4	4.1.2, Number 5	150	What types of valves will be located on each side of the faults? If the applicant contemplates only using a check valve and a manual mainline block valve, these could be ineffective in some situations if a rupture occurred.
4-30,31	Colorado River	151	The mitigation measures detailed herein should in no way be construed as to include all those measures which may and will be required by State agencies such as the State Lands Commission.
4-53	Remote Control Valves	152	Since the discussion of remote-controlled valves is discussed here, the Commission wishes to address another inadequacy in the present design of valve placements. The check valve located on map 1.1.1-3 just west of Cabazon is totally ineffective, since the direction of pumped flow is also the direction of gravity flow. Further, the map refers to all the valves referred to as remote-controlled in the text as automatic valves. Since there is a significant distinction between an "automatic valve" and a remote-controlled valve, the terms should not be interchanged.
4-54,55	Table 4.2.7-1	153	This table does not reflect State Lands Commission jurisdiction and involvement.
5-10	Groundwater	154	The impacts to groundwater resulting from chronic small oil leaks from the pipeline could be mitigated if the applicant would line the trench with an impermeable substance, where the trench or pipeline crosses a recharge area.
5-11	Normal Operation	155	It is stated that prohibiting the ballasting into petroleum cargo tanks may not be enforceable because the Pier J facility will be designated as a common carrier installation; the implication being that any tank vessel may off-load at the facility whether it has segregated ballast tanks or not. The importance and need of segregated ballast tanks and an inerting system to displace volatile gases in the cargo

-2-

Page	Reference		Comment
			tanks has been demonstrated by the recent catastrophic explosion of the tank vessel "Sansinena". In addition to safer loading and unloading operations, this system reduces purging of cargo vapor pollutants into the Los Angeles air shed. Legislation to prohibit tank vessels without these improvements from using such ports as Long &each and Los Angeles in densely populated areas should be considered.
5-13	Hydrocarbons and Oxidants	156	If the proposed storage/pumping site is not located at Hynes and at the Dominguez Hills site as suggested in the document, where will the trade-off occur? Further, if there is no reduction but an increase in imported oil, no trade-off can be considered since the storage tanks which are removed must be substituted at another site. Thus, the only mitigation which would result would occur from the removal of older tanks and the substitution of newer tanks.
		157	Emissions from storage facilities could also be reduced by constructing a combination fixed/floating roof tank. Although these tanks are expensive, they effectively reduce pollutants by 99.9%, according to an ARB communication.
6-6	Soil	158	What about the effects to soils underlying the desert pavement?
6-8	Vegetation	159	This discussion fails to treat the subject of rare or endangered species. Since the &LM has indicated they don't know whether these species exist or don't exist along the pipeline route, it would be appropriate that the long-term impacts to these species should be considered.
6-12	Natural Gas	160	The report fails to consider two options: (1) Alaskan and other gas will be liquefied, enter into California, and then be transmitted to the mid-continent through the El Paso lines; (2) Alaskan gas will be piped to the mid-continent (Alcan route with no California leg) and then additional gas will be allocated to California from the Permian &asin.
7-3	Last Paragraph	161	Again and again reference is made to the expansion of Pier J with dredging done

Page	Reference		Comment
		161	for SOHIO. Since it seems that these projects are so interrelated, a more detailed discussion of the environmental effects of this expansion should be included.
8-1	8.0.1	162	The document dismisses the alternative of sale or trade of Alaskan crude and the reduction of production much too lightly. Both are quite feasible and should be considered in relation to the proposed project.
8-6,7	Chart	163	On what basis and by what means were these descriptive terms based?
8-8	Cherry Point	164	The existence of manmade constraints, 125,000 DWT limit into Puget Sound, should not be used to preclude any consideration of that site for the SOHIO or any other similar project.
A-3	Paragraph 1 & 2	165	Is it sufficient to only x-ray 20-40% of the Southern California Gas line? So what if certain things were "the practice"? The recent controversies over TAPS line welds, etc., should teach the Federal Government something.
A-20	Paragraph 3.0	166	Does the existing gas line meet this criteria?
A-59	Table A2.1.3.2-1	167	The table of Major Historic Earthquakes fails to list the third largest California earthquake in the twentieth century, the 1927 earthquake off Point Arguello - M 7.5. This quake also generated a tsunami that struck Surf and probably San Luis Obispo Bay.
A1-338	A11	168	Since Appendix A contains an analysis of the design of the project, it would seem appropriate that the BLM would incorporate the recommendations herein into the mitigation measures.

SOHIO EIS (BLM)
GENERAL COMMENTS

1. There are continual references throughout the DEIS that the exact nature and scope of the project's impact are unknown because the applicant's proposal is too vague and/or incomplete. Since the raison d'etre of an DEIS is to discuss the environmental impacts of a proposed project, a firm project would seem to be a necessity. While staff attempts to assuage any criticism on this point by indicating "worst case assumptions" in such vague areas, it is still imperative that policy makers be given valid and supportable analyses. As we have maintained all along, BLM must obtain final data from SOHIO at the earliest possible date. Should BLM continue in its current vein, consideration should be given to the preparation of supplements to the existing DEIS which would be available for and subject to governmental and public scrutiny and comment in the event that SOHIO does ever finalize its project. Furthermore, the document shows too much reliance on agents of the applicant for information and does not indicate independent verification by BLM or its agents of such material.

2. 169 The document also deviates from the State DEIR and governmental knowledge in one major and all important point -- the location of the surge and initial pump facilities. The known project description and the State DEIR place such a facility at Hynes with alternate sites at Dominguez Hills, etc. This document, however, stipulates that the primary site is Dominguez Hills and discusses no other storage site. Along with this "external" inconsistency is the internal one where the DEIS discusses the Dominguez Hills site, but indicates Hynes on appropriate maps. This emphasis on the Dominguez Hills site must be substantiated and justified by BLM and the applicant as it carries serious ramifications regarding SOHIO's proposed air quality trade-offs and hence a zero based air pollution project. In this light, 170 the document does not adequately address the air quality feasibility of the project under the provisions of Federal air quality laws.

171 In addition, the document indicates the location of the pipeline from the terminal to the inland storage site to be the west side of the Los Angeles River. This is again contrary to the information given the State and reflected in the DEIR. Again, BLM and the applicant should stipulate when and why the indicated change was made.

3. 172 There is no reference within the document as to the existence of or plans for the "sea leg" study completed for the U.S. Army Corps of Engineers by Tetra Tech, Inc., which was to be made a part of the DEIS. The material in the existing DEIS is cursory at best in this area and the study's exclusion from the DEIS does not afford other agencies and the public a chance to comment as with the existing document. Is the study to be incorporated into the final EIS and, if so, should not it be subject to comment, and if it is not planned to include it in the EIS, why not?

4. 173 If the Federal Government cannot evaluate a project in light of its effects on national and/or regional policy, no one else can. The State has been told continually by the Federal Government that national impacts and effects must be addressed by Federal agencies. This document is a disappointment in this regard as it does not address the project as it would affect regional supply patterns, as it would be affected by similar energy projects (LNG, Elk Hills production and distribution), as to its cumulative effects, etc. One would think that this document might have benefited more from the staff work conducted in the preparation of the draft FEA report on the disposition of Alaskan oil and gas, particularly in the areas of economic comparisons of alternatives, effectiveness of the project in supplying Midwestern and Northern Tier refineries with crude stock, etc. In short, this document should have considered and spoken to the anticipated effects of Alaskan oil from wellhead production to its final terminus at a refinery. The oil is not going to stop at Midland and neither should the EIS.

State of California

L. Perry Health

Memorandum

To SOHIO Task Force Members
Reviewing Agencies and Departments

Date: December 6, 1976
916-445-0613

1976
13-199
LSB 12/29

Please coordinate as necessary.

From **Governor's Office**
Office of Planning and Research Laurie K. Wright

Subject: SCH 76120785 - CRUDE OIL TRANSPORTATION SYSTEM: VALDEZ, ALASKA TO MIDLAND, TEXAS

Attached for your review and comment is the Bureau of Land Management's (BLM) Draft Environmental Impact Statement on the Crude Oil Transportation System: Valdez, Alaska to Midland, Texas. The Sohio Transportation Company proposal involves: 1) tanker shipment of up to 700,000 barrels per day of crude oil from Valdez, Alaska to Long Beach; 2) construction of a marine terminal at the Port of Long Beach for crude oil offloading and storage; 3) construction of a new pipeline in California and Texas, and 4) conversion of existing natural gas pipelines in California, Arizona, and New Mexico to crude oil transportation.

The attached document includes: 1) Executive Summary; 2) Description of the Proposal; 3) Description of the Environment, (3 volumes); 4) Environmental Impacts of the Proposed Action; 5) Mitigating Measures, Adverse Impacts, etc.; and 6) Maps. The State Clearinghouse will distribute, at your request, the following supplemental documents:

1. Final Report, BLM-SOHIO Project, Volume 5, Air Quality;
2. Final Report, BLM-SOHIO Project, Volume 8, Energy Supply/Demand;
3. Air Quality Impact of the Proposed SOHIO Tanker Fleet on Port Valdez;
4. SOHIO Crude Oil Transportation System Tanker Traffic Study.

The Task Force will meet sometime during the week of December 27, to discuss the state comments on this document. The Bureau of Land Management would like to receive your comments no later than January 10, 1977. For this reason, the Office of Planning and Research requests that you forward comments to the Resources Agency by January 3, 1977. We will forward the computer printout that normally accompanies environmental documents from this office to you within approximately two weeks.

Laboratory Services Branch
DEC 1976

Task Force
Chm Jim Rote Resources 322-5228

RESPONSE

Comment #1

The alternatives in Chapter 8 have been revised and expanded, including alternative ports along the central California coast.

Comment #2

Although peripheral discussion of future landfill appears in the FES, the general plan for increased landfill in Long Beach Harbor is proposed by the Port of Long Beach and is not within the scope of this document. However, further environmental evaluation and mitigation will be required in the Corps of Engineers' permitting process for the breakwater as well as future port developments.

Comment #3

If the project is approved, the dumping method will be specified in the Corps of Engineers permit. The selection of method will consider adverse effects and will be subject to EPA approval.

Comments #4 and #5

The text has been expanded in Section 2.1.12.3, under San Pedro Bay-Los Angeles County, to include additional detail on fishing opportunities and use of the Port of Long Beach.

Comment #6

A discussion of impacts on sport fishing use of the Port area has been expanded in Section 3.1.12.3, under Southern California Coast and Port of Long Beach. A mitigating measure to minimize the loss of public fishing opportunities has been added to Section 4.2.2 of the FES.

Comment #7 and #8

A text addition was made in Section 3.1.8.3.2, under Ocean, to reflect this comment.

Comment #9

The text was changed in Section 3.1.8.2, under Seabirds, to reflect this comment. These family names also appear in the glossary.

Comment #10

Text changes were made in Sections 4.2.7 and 4.2.9 to reflect this comment.

Comment #11

Section 4.1.6 reflects this comment.

Comment #12

Chapter 4, Mitigating Measures, has been developed further in the FES. See Section 4.0 for method of presentation.

Comment #13

The statement relating to the adequacy of impact discussion applies only to treatment of new pipeline construction as an alternative within the context of this ES. The decision as to whether a new ES would be required for all-new pipeline construction would have to be made when a specific project was proposed.

Comment #14

Offsite mitigating measures were not considered or committed to in Chapter 4.

Comments #15, #16 and #17

Chapter 8 has been revised and expanded to include discussions of oil spill impacts on sea otters and Pismo clams along the central California coast.

Comment #18

Sites on the list attached to this letter, which are located near the Port of Long Beach and in the pipeline area, have been included in Table 2.1.9.1-1.

Comments #19 and #20

As discussed in Section 4.2.8, following the completion of cultural resource surveys, the identified resources would be evaluated in terms of the National Register of Historic Places criteria as set forth in 36 CFR 800. Following this evaluation, consultation with each of the affected State Historic Preservation Officers would be initiated. Based on the consultation, mitigation plans would be developed for review by the Advisory Council on Historic Preservation.

Comment #21

Please refer to Section 3.1.17, Public Safety and Public Health, and Appendix A1.1.1.1 on tankers for a discussion of these questions. In Section 4.2.2 a mitigating measure was added requiring all tankers to be equipped with inerting systems.

Comment #22

There was no comprehensive analysis available in time for this publication. The analysis of oil spill probabilities contained in the Tanker Traffic Study (Appendix A1.1.1.1-A) discusses relevant characteristics of the SOHIO fleet.

Comment #23

The effects of double hulls and other tanker safety features are discussed in a qualitative manner in the updated Tanker Traffic Study, Appendix A1.1.1.1-A, of the FES. Although the calculations have not been done for accident rates of a hypothetical tanker fleet, the methodology and data presented in the appendicized study could be utilized for such probabilities.

Comment #24

Section 2.1.3.3.1, under Seismicity, has been revised to reference Table 2.1.3.3.2-1 which describes the Palos Verdes fault as active and capable of generating a magnitude 7 earthquake.

Comment #25

It is proposed to dredge the harbor channel and berthing area to a depth of 62 feet. This is the approximate depth of the existing harbor channel, side walls of which have remained intact for years, using occasional maintenance dredging.

Comment #26

See Comment 24 above.

Comment #27

The existing fill and subgrade materials will be densified to a depth of 60 feet to minimize the effects of liquefaction. The text has been revised to reflect this comment in Section 2.1.3.3.1, under Liquefaction, and in Section 1.2.2.1, under Onshore Construction.

Comment #28

The comments on the Cherry Hill fault are noted in the revised Section 2.1.3.2.2, under Regional Tectonics and Structural Setting.

Comment #29

Sections 2.1.3.2 and 2.1.3.3 have been revised to indicate the Newport-Inglewood fault has a maximum credible seismic event of 7.5.

Comment #30

The Regional Tectonics and Structural Setting of Section 2.1.3.2.2 has been revised to include the Cucamonga fault.

Comment #31

Using Table 3.1.16.5-5, it can be seen that scenarios are accounted for in the total supply of gas to southern California and that the pipeline capacity without the 30-inch line would be adequate to accommodate east to west transmission of Alaskan gas in the most likely case, but not in the high volume case.

Comment #32

A continuing study by the applicant to determine the precise location of the most important valves throughout the system is presently under way. This study was not completed at this writing, but was comprehensive enough to address the areas that were considered the most critical.

Comment #33

SOHIO's application explicitly proposes shipping 500,000 barrels of crude oil per day to Midland. All supply and demand estimates for crude oil on the West Coast predict a surplus. Section 2.2.16.5 lists six projections of surplus oil.

Comment #34

While the Department of Water Resources may be investigating the potential use of a state-owned, oil-fired plant, no decision has been reached on this project. Furthermore, demand projections include changes in technology.

Comment #35

Peak emissions and realistic worst-case scenarios form the bulk of the sections on air quality impacts (Section 3.1.6); average and total emissions have been added to Appendix A3.1.6.1.

Comment #36

The discussion of energy supply and demand and impacts related to the conversion of one existing gas pipeline contained in Sections 2.1.16.5, 3.1.6.1.2, and 3.1.16.5 and the referenced studies are believed adequate for the proposed action. The larger questions of impacts resulting from future gas pipeline abandonments or future California gas supplies are beyond the scope of this project.

Comment #37

Section 3.1.17 has been expanded to discuss explosions and fire hazards.

Comment #38

It was assumed in the discussion in the DES and FES that an agency was enforcing these regulations. Since this is only a proposed mitigating measure at this time, the question is hypothetical; impacts in Chapter 5 of the FES are not affected by this measure. Air quality impacts in coastal waters have been included in Section 3.1.6 of the FES. Questions of safety and tanker operations are discussed in Section 3.1.17 and in Appendix A1.1.1.1. SOHIO would not own the terminal.

Comment #39

Mitigating measures have been added to Section 4.2.2 of the FES to require all tankers using Pier J to burn .5 percent or less sulfur content bunker fuel, to have fully segregated ballast, inert gas systems, and to prohibit purging in port.

Comment #40

The California Air Resource Board has promulgated regulations which apply to ALL stationary sources including vessels not under propulsion. Thus, the CARB has been retained in Section 4.2.2 as an agency having authorities with regard to the proposed mitigating measures.

Comment #41

A discussion of emissions in coastal waters has been added in Section 3.1.6 of the FES.

Comment #42

As proposed, the project is assumed to result in a back out of 200,000 barrels of foreign crude oil. The anticipated crude slate with and without the proposed project is presented in Table 3.1.16.5-1 (note that no change in Indonesian crude imports is expected). A discussion of back outs and air quality trade-off has been added in Section 4.1.5. Section 3.1.6.1.2, under Effects of Oil Replacement, has been revised.

Comment #43

A substantial relocation of a marine terminal requiring a new pipeline corridor is an alternative to the proposed project, not a mitigating measure. This alternative is discussed in Section 8.2.6.

Comment #44

A discussion of emissions from electrical generation similar to that in the State EIR can be found in Sections 3.1.6, under Electrical Power Generation; 3.1.6.1.2, under Emissions From Electrical Power Generation; and 3.1.6.2.2, under Emissions From Electrical Power Generation.

Comment #45

A discussion of air quality impacts of coastal traffic has been added in Section 3.1.6 of the FES.

Comment #46

Any future expansion of facilities will require new environmental statements and permits. Consequently, any discussion of impacts related to expansion phases was deleted from the FES to remove the implication that the subject had been covered.

Comment #47

These emissions are presented in Appendix A3.1.6.1 of the FES.

Comment #48

IMCO is not a regulatory body and therefore has no authority in these matters.

Comment #49

Particulate impacts from accidents have been added to Sections 3.1.6.1.2 and 5.6.1 in the FES.

Comment #50

The discussion of competing emission factors from tanks was expanded in the FES. BLM found insufficient grounds for redoing the photochemical modeling with new emission factors.

Comment #51

No mitigating measures which were specifically designed to conserve energy were committed to by the applicant or by permitting agencies. Impacts were discussed in terms of those energy uses anticipated for the project.

Comment #52

Figure 2.1.3.2.1-1 has been revised to reflect changes in locations of near offshore faults.

Comment #53

See response to Comment 24 above.

Comment #54

Figure 2.1.3.2.2-1 has been incorporated into the text to reflect this comment.

Comment #55

See response to Comment 24 above. The Cabrillo fault is treated in Section 2.1.3.2.2.

Comment #56

Minor faults are not receiving special design as the pipeline state-of-the-art is such that construction methods can facilitate "minor" offsets.

Comment #57

Sections 2.1.3.2 and 2.1.3.3 have been generally revised to reflect these comments on the Palos Verdes and Newport-Inglewood faults. Also see Comment 24.

Comment #58

No retrievable mineral resources have been identified adjacent to the proposed right-of-way or close enough to the alignment to be impacted.

Comment #59

For the purpose of this Environmental Statement, Figure 2.1.3.3.1-1 is considered sufficiently accurate.

Comment #60

See Comment 59.

Comment #61

The text in Section 2.1.3.3.1, Marine, has been altered to reflect this comment.

Comment #62

Text changes regarding the Palos Verdes fault have been incorporated into Sections 2.1.3.2 and 2.1.3.3.

Comment #63

See Comment 27.

Comment #64

See Comment 25.

Comment #65

Section 2.1.3.3.1, under Tsunamis, has been revised to reflect this comment.

Comment #66

In context of this report, harbor oscillation and seiche are considered to be interchangeable. A discussion of harbor oscillation is provided in Section 2.1.5.1.3.

Comment #67

Special fault studies discussed in Section 3.1.3.3.2, under Surface Fault Rupture, have been added to the text and reference list.

Comment #68

See Comment 30.

Comment #69

A more detailed discussion of Operational Level Earthquakes (OLE) and Contingency Level Earthquakes (CLE) has been included in Section 2.1.3.2.2, under Seismicity.

Comment #70

The discussion of Puente Hills geology in Sections 2.1.3.2.1 and 2.1.3.2.2 and the presentation on Map 2.1.3-1 in Attachment 1 is believed to be adequate. As discussed in Section 3.1.3.3.2, this area would receive additional geologic investigation by the applicant.

Comment #71

See Comment 58.

Comment #72

It is believed that the subject matter was adequately covered.

Comment #73

Even considering additional active and potentially active faults as requested by earlier comments, the San Andreas and San Jacinto fault zones realistically present the only hazards by fault rupture. The San Jacinto fault is bracketed by an automatic valve and check valve, as is the San Andreas. Both fault zones are near maintenance bases and areas of potential manpower for cleanup assistance should a break occur. Volumes of oil spill because of movements of minor faults would amount to the volume of line charge between the break and adjacent valves. This is assuming a complete severing of the pipe. This specific information is not yet available since the final pipeline and valve alignments have not been determined by the applicant.

Comment #74

The applicant plans to bracket the San Jacinto and San Andreas faults with remote-controlled block valves on the pressure side and check valves on the down-pressure side as discussed in Sections 2.1.3.2 and 2.1.3.3.

Comment #75

Section 4.2.2, Port of Long Beach and Terminal Area, has been revised to reflect this comment.

Comment #76

The reference to minimizing seismic hazards has been deleted in the proposed mitigating measure in Section 4.3.1.

Comment #77

Water quality of San Pedro Bay is discussed in Sections 2.1.5.1.1 and 2.1.5.1.3. Tidal heights, tidal currents, and circulation patterns are discussed in Section 2.1.5.1.3.

Comment #78

The state-of-the-art is not available to quantify trace metals and other contaminants associated with macromolecular organics and suspended particles released to the water column as a result of dredging. Therefore, to state firmly that dredging bottom sediments will pose a real threat to the bay environment is without supportive background information.

Comment #79

Throughout Chapter 3 the effects of oil spills upon air pollution, the terrestrial and aquatic environments, and other specific environs were discussed. The probability of given volumes of oil spills at selected locations was also presented in Tables 3.1.5.1.2-6 and -7.

Comment #80

Oil spill trajectory information developed for the Corps of Engineers by Tetra Tech, Inc. has been incorporated into Section 3.1.5.1.2 of the FES. This study was not available for earlier distribution. Additional trajectory studies either were not applicable, were unavailable, or were not obtained for use in the FES.

Comment #81

Oil spill contingency plans are now completed (see Chapter 1, Table of Contents, for availability) and were considered in the discussion of impacts in Chapter 5.

Comment #82

The information provided in Section 3.1.16.5, under Natural Gas, does address the tanker/pipeline routing of the Alaskan supplies as much as available data permitted.

Comment #83

The only alternative mitigating measure within the scope of this project would be not to issue the permit for initial abandonment. This was not considered an appropriate mitigating measure in the FES.

Comment #84

Section 3.1.16.1, Sea Leg, has been changed to reflect the degree of impact on southern California commercial fishing and revenues in the Los Angeles area.

Comment #85

Regarding indirect impacts, Section 3.1.16 was changed to reflect interindustry linkages in California from large steel purchases and construction. No known refineries are presently proposed in Arizona, and thus indirect impacts are purely speculative.

Comment #86

The relationships between air quality standards, health effects, and socioeconomic factors have been clarified in Section 2.1.6.5. The rationale for not quantifying health effects in the section on air quality impacts (Section 3.1.6) has been expanded. Socioeconomic factors (including populations downwind from emissions) are used in comparing alternative sites to the project as proposed (Chapter 8). Section 3.1.17 now incorporates a fuller discussion on safety.

Comment #87

The discussion of an exchange of oil with a foreign nation, such as Japan, has been revised in Section 8.1.1 of the FES. The terms of existing legislation concerning such a trade have been clarified and impacts discussed are similar to the No-Action alternative.

Comments #88 and #89

Economic considerations of the various alternatives are outside the scope of this environmental analysis. Detailed energy consumption data and mitigating measures are currently unavailable for the various alternatives and would be the subject of separate environmental assessments should a specific alternative be proposed. For a general discussion of these topics, refer to the Federal Energy Administration study, "North Slope Crude -- Where to? -- How?" referenced in Chapter 8 of the FES.

Comment #90

See Comment 87 above.

Comment #91

This comment was considered but solar energy and/or conservation programs were not considered viable alternatives to the proposed project.

Comment #92

Various alternative monobuoy sites offshore of the central and southern California coast are discussed in Section 8.2 of the FES.

Comment #93

Relevant material from the study of the tanker route prepared by Tetra Tech, Inc. for the Corps of Engineers has been incorporated into appropriate sections of the FES.

Comment #94

A discussion of tanker routing has been included in Appendix A1.1.1.1-A, Tanker Traffic Study, to the extent that traffic volumes, navigation aids and hazards to navigation are discussed in relation to lease development outside of San Pedro Harbor. In addition, SOHIO is working with the U.S. Coast Guard to develop a vessel traffic system (VTS) similar to the one now in force for the Atlantic Ocean.

Comment #95

The total electric power requirements and related impacts for the proposed pipeline are presented in the FES. A discussion of the electrical power requirements for OCS development is premature and beyond the scope of this ES.

Comment #96

The treatment of trade-offs has been revised and expanded in the FES. (See Sections 4.1.5 and 5.6.2.) Dominguez Hills has been proposed for the inland terminal.

Comment #97

The historical records of events such as these have been considered in Appendix A1.1.1.1-A, the Tanker Traffic Study, and in Section 3.1.17.

Comment #98

The project is considered a common carrier system as addressed in Section 1.0, under Introduction and General Project Description, and thus the analysis is based on the capacity of the system for 700,000 bbl/d.

Comment #99

At this writing, the Dominguez Hills terminal is considered the site for the inland terminal. No alternatives have been addressed in the FES.

Comment #100

The FES has addressed this subject as being a possibility. Any future conversion of a second gas line would require an additional complete environmental analysis.

Comment #101

This nationwide energy and marketing problem is outside the scope of this project.

Comment #102

See Comment 98 above.

Comment #103

This has been corrected in Section 1.2.2.1, under Dredge and Fill.

Comment #104

This discussion has been clarified in Section 1.2.2.1, under Storage Tanks.

Comment #105

A preliminary hydrostatic test plan has been developed, a description of which is included in Section 1.2.3.2, under Testing, and a more detailed draft has been presented in Appendix A1.2.3.2.

Comment #106

Testing of welds is discussed in Section 1.2.3.2, under Pipe Bending, Laying, and Welding. Inspection of the welds would probably be done by a contractor of the applicant.

Comment #107

Section 1.2.3.2, under Main-Line Valves, has been expanded in order to discuss check valves more thoroughly.

Comment #108

Table 1.2.3.2-3 has been altered, and State Lands Commission jurisdiction has been addressed in Section 1.3.2.1, under State of California.

Comment #109

Section 1.2.3.2, under Testing, has been revised and updated to reflect current hydrostatic test plans. All new pipeline and major segments of old line will be tested. A waiver would be requested on those portions of the existing line that have been tested recently.

Comment #110

This paragraph has been revised in Section 1.3.2.1.

Comment #111

Detailed discussion of the Elk Hills oil pipeline project is beyond the scope of this statement. BLM believes the present discussion is adequate.

Comment #112

The SOHIO project does not include any filling within the harbor except for the proposed breakwater. The application for a Corps of Engineers permit to construct this project provides that all other dredge material will be dumped at an EPA approved site. Any modification of this project would require a revised permit application.

Comment #113

Section 2.1.1.1, Coastal Region, has been changed to reflect this comment.

Comment #114

Section 2.1.1.1, Coastal Region, has been changed to reflect this comment.

Comment #115

The Severe Winds discussion in Section 2.1.1.1 has been corrected.

Comment #116

The figure "Fault Map of the Port of Long Beach" has been revised.

Comment #117

Section 2.1.3.3.1, under Subsidence, has been changed to reflect this comment.

Comment #118

Section 2.1.3.3.1, under Tsunamis, has been revised to reflect this comment.

Comment #119

No particular hazards are presented by the argids during construction. Loss of soil as fugitive dust of clay particles and reduced fertility by profile mixing will be the most serious and long-lasting impacts. All mitigating measures, committed or proposed, regarding soils are presented in Chapter 4 of the FES.

Comment #120

The text was changed to reflect this comment.

Comment #121

The text was changed in Section 2.1.5.1.2, Table 2.1.5.1.2-1, to reflect this comment.

Comment 122

This tidal height represents the maximum measured during the data-gathering operation. The other factors mentioned in the comment are not considered significant input for environmental analysis.

Comment #123

This statement in Section 2.1.5.2, discussion of the South Coastal Basin, has been revised.

Comment #124

The more recent data in the FES includes northwestern Riverside County.

Comment #125

The contradiction has been removed by broadening the statement.

Comments #126 through #131

These figures are taken directly from "The National Energy Outlook 1976" and reflect early 1976 assumptions. They are the most up-to-date figures available.

Comment #132

BLM believes this paragraph agrees with this comment.

Comment #133

The overall maximum onstream efficiency of refineries in PADD V was calculated in Table 2.1.16.5-20 by applying a combining factor to the efficiency of individual crude refinery units (i.e., 96 percent individual efficiency times 90 percent combining factor = 86.4 percent). This overall onstream efficiency then yields the composite capacity, which is the best available estimate of the refinery facilities. The combining factor itself is based upon actual experience and was obtained from private sources and the literature. The units of production are correct because their use depends upon the quantity of oil in the process which is being discussed.

Comment #134

The ultimate disposition of Elk Hills oil has not been clearly defined. The assumptions in the FES are therefore based upon best available information at the time analysis began for the ES.

Comment #135

To date, any commitments made by SOHIO are not specific in terms of volume of petroleum sales along the pipeline route. It is presently the SOHIO position that if a demand is identified at a location along the route, SOHIO would consider supplying that demand. No firm plans for nearby refineries are presently known.

Comment #136

The demand changes in Table 2.2.16.5-4 were reanalyzed in light of the cited paper and no changes were believed to be necessary.

Comment #137

The Energy Supply/Demand section was included in the DES and FES in order to adequately address the issues of pipeline abandonment, amount of potential petroleum displacement, and the necessity of the project.

Comment #138

Table 3.1.5.1.1-1 has been incorporated into Section 2.1.4.1, and the text has been clarified.

Comment #139

Table 3.1.5.1.1-1 has been moved to Section 2.1.4.1 where it supplements the general sediment description for San Pedro Harbor.

Comment #140

This statement was deleted from the FES.

Comment #141

The comment was noted but it was believed further discussion was not necessary.

Comment #142

Comment was noted but no text changes were made.

Comment #143

Weathering factors for these models are discussed in Section 3.1.5.1.2, under Oil Spill Trajectory.

Comment #144

The figures cited are derived from national average statistical data by MIT (1974). Such averaging typically may not accurately relate to a specific project. The specific small-leak monitoring systems to be installed on this project are in the final design and would provide a much higher level of detection.

Comment #145

The oil spill volumes were calculated based upon the best available information at the time the ES was being prepared.

Comment #146

Differences between the final drafts of California and Federal environmental statements are not expected to be significant. The paragraph has been deleted in the FES.

Comment #147

Section 4.2.7 reflects this comment. ment.

Comment #148

This error has been corrected in the FES.

Comment #149

The figures were checked with current available information from the applicant, and no text change was made.

Comment #150

See Comment 74.

Comment #151

Section 4.0 in Chapter 4 has been modified to reflect this comment.

Comment #152

Locations of the main valve and check valve discussed here have been changed on Map 1.1.1-3. For the purpose of this ES, remote-control valves are considered to be the same as automatic valves.

Comment #153

This table lists only those areas considered environmentally sensitive when remote-control valves have been proposed. No state lands are involved in these areas.

Comment #154

This mitigating measure was not analyzed nor was it committed to by the applicant or any agencies with jurisdiction.

Comment #155

The South Coast Air Quality Management District and the California Air Resources Board are now committed to these measures.

Comment #156

Refer to the revised and expanded discussion of trade-offs proposed by SOHIO and the initial stand taken by the agencies charged with maintaining air quality in the air shed (Chapter 4). Further developments are expected at a later date. See Section 2.1.6.5 in the FES for EPA offset guidelines; hydrocarbon emission can be offset on a regional basis.

Comment #157

The Environmental Protection Agency, the Western Oil and Gas Association, and the California Air Resources Board, among others, are actively pursuing the definition of "Best Available Control Technology" with respect to oil tanks. They periodically publish their latest findings. Current literature indicates a variety of estimates as to minimum obtainable tank emissions.

Comment #158

The impact on soils with or without a surface desert pavement will be the same because the pavement will be destroyed by dozer clearing and excavation or will be displaced during operations by vehicle traffic. Several years of wind action will restore the finer textured pavements (coarse sands and small gravels), but coarser textured pavements (large rock) will not reappear unless replaced mechanically. This action has been proposed as a mitigating measure in Section 4.3.

Comment #159

Section 6.1.3, under Endangered and Threatened Plants, has been revised to reflect this comment.

Comment #160

The five alternatives representing the "most likely" cases of gas supply are presented in Sections 2.1.16.5 and 3.1.16.5 and include the alternatives mentioned.

Comment #161

The SOHIO project does not include any filling within the harbor except for the proposed breakwater. The application for a Corps of Engineers permit to construct this project provides that all other dredge material will be dumped at an EPA approved site. Any modification of this project would require a revised permit application, and any new filling project within the harbor would require a separate permit application. In either case, no filling could proceed before an analysis of the environmental impacts was completed and the project was reviewed by the public. For these reasons, further discussions of impacts due to future port projects are considered outside the scope of this project.

Comment #162

The discussion of an exchange of oil with a foreign nation, such as Japan, and reduction of production has been revised in Section 8.1.1 of the FES. Impacts are discussed relative to the proposal.

Comment #163

The charts have been deleted and comparison tables substituted in Section 8.0.2 of the FES.

Comment #164

Section 8.2.2.1 has been revised to discuss the Cherry Point alternative port, including current legislative and judicial decisions which could affect use of the site.

Comment #165

BLM believes that X-ray of 20 to 40 percent of the welds coupled with hydrostatic testing of all new line and all but the most recently tested of existing line is adequate.

Comment #166

The coating on the existing pipeline is satisfactory for use in crude oil service. It is being continually monitored for any deficiency. If and when a deficiency might occur in the coating, the cathodic protection current will be increased enough to prevent any corrosion.

Comment #167

Appendix A2.1.3.2-1 has been revised.

Comment #168

The comment was noted but no specific mitigating measures were identified in the appendices that should be included in Chapter 4, Mitigating Measures.

Comment #169

Dominguez Hills is the inland terminal as proposed by the applicant, and all inconsistencies in the maps have been corrected.

Comment #170

Dominguez Hills has been proposed as the inland terminal and impacts on air quality are based on this site. These impacts (Section 3.1.6) reflect Federal and state air quality laws and regulations. A discussion of possible trade-offs has been added to Section 4.1.5 of the FES.

Comment #171

If the Hynes terminal had been proposed, the pipeline would have traversed the east side of the Los Angeles River flood control channel, but since the inland terminal is proposed as Dominguez Hills, good engineering practices dictate that the pipeline traverse the west bank of the Los Angeles River flood control channel.

Comment #172

See response to Comment 93 above.

Comment #173

The scope of the project and this ES do not include consideration or subsequent determination of a national energy policy.

ADDRESS ALL COMMUNICATIONS
TO THE COMMISSION
CALIFORNIA STATE BUILDING
SAN FRANCISCO, CALIFORNIA 94102
TELEPHONE (415) 557-

Public Utilities Commission
STATE OF CALIFORNIA

FILE NO. CP 75-362

January 7, 1977

Project Manager
U. S. Department of Interior
Bureau of Land Management
EIR Project Office
P. O. Box 660
Los Alamitos, California 90720

Federal Power Commission
Office of Environmental Officer
825 N. Capitol Street, N.E.
Washington, D. C. 20426

Dear Sirs:

Re: Draft Environmental Impact Statement
Crude Oil Transportation System
Valdez, Alaska to Midland, Texas

The Public Utilities Commission of the State of California (CPUC) hereby submits its comments with respect to the Draft Environmental Impact Statement, Crude Oil Transportation System: Valdez, Alaska to Midland, Texas.

The CPUC, acting in conjunction with the Port of Long Beach, has prepared a Draft Environmental Impact Report (DEIR) for the subject crude oil transportation system proposed by SOHIO Transportation Company. The DEIR was released to the California System Clearinghouse in October, 1976. The DEIR concentrated primarily on the impacts of the proposed project within California. The comments of the DEIS were concentrated primarily on the impacts of the proposed project within California and will relate to the significant variations between the DEIR and DEIS.

The CPUC is an intervenor in the proceeding before the Federal Power Commission (FPC) entitled El Paso Natural Gas Company, Docket CP 75-362. Based on information and belief, the FPC intends to use the BLM's final Environmental Impact Statement for SOHIO's proposed crude oil transportation system as a basis

for the FPC's final decision relating to the proposed abandonment of certain primary and appurtenant facilities of El Paso Natural Gas Company. Therefore, copies of the CPUC's comments on BLM's DEIS are being served concurrently herein on all parties of record in Docket CP 75-362.

Very truly yours,

Frederick E. John

Frederick E. John
Senior Counsel

Enclosure

FEJ:rc

COMMENTS OF PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA
REGARDING
DRAFT ENVIRONMENTAL IMPACT STATEMENT
CRUDE OIL TRANSPORTATION SYSTEM
VALDEZ, ALASKA TO MIDLAND, TEXAS

The Public Utilities Commission of the State of California (CPUC) hereby submits its comments regarding the Draft Environmental Impact Statement (DEIS) prepared by the Bureau of Land Management (BLM) for the crude oil transportation system being proposed by SOHIO Transportation Company from Valdez, Alaska to Midland, Texas.

The comments submitted herein are concentrated primarily on the impact of the proposed project within California and will point out the initial differences between BLM's DEIS and the Draft Environmental Impact Report (DEIR) which has been prepared jointly by the CPUC and the Port of Long Beach in accordance with the California Environmental Quality Act.

At the outset it should be noted that the letter which accompanied the copy of BLM's DEIS contained a notation that, in addition to the filing of the DEIS which was enclosed for review, certain "supplementary studies" were available at selected libraries and clearinghouses. These "supplementary studies" were as follows:

Final Report, BLM-SOHIO Project, Volume 5, Air Quality
Final Report, BLM-SOHIO Project, Volume 8, Energy Supply/Demand
Air Quality Impact of the Proposed SOHIO Tanker Fleet on Port Valdez, Alaska
SOHIO Crude Oil Transportation System Tanker Traffic Study

1 The subject matter of these "supplementary studies" constituted the initial impact of the proposed SOHIO project. Therefore, these "supplementary studies" should have been incorporated as part of the DEIS for review by all interested parties, without requiring these parties to make separate requests for these documents. Also, it is

1 imperative that these documents be made part of BLM's final Environmental Impact Statement. Finally, based on information and belief the document entitled "Air Quality Impact of the Proposed SOHIO Tanker Fleet on Port Valdez, Alaska" is still not available for review.

EXECUTIVE SUMMARY

Page

I-8 Is the proponent preparing a contingency plan for the marine routing? The understanding is that a plan is being prepared for the terminal berth area and pipeline routing only.

I-13 Pipe-supported trestle should be pile-supported. The new breakwater requires 2.3 million tons of rock from the Santa Catalina quarries, 285,000 tons of armor rock and 500,000 cubic yards of spoil material from harbor dredgings. Also, approximately 3.0 million cubic yards of spoil material are to be removed during dredging.

I-15 The drawing appears to show a breakwater constructed along the future landfill. This may not be accurate representation.

I-17 The inland terminal is ± 12 miles from Pier J. (11.3 miles to the Hynes terminal)

I-28,5 2,000,000 barrels per day (MBPD) confusing with 2,000 thousand barrels per day (MBPD)

I-34,5 Charts switched

I-38 Expansion would also require an additional berth and storage facilities.

II-5 The SCAPCD has also adopted a New Source Review rule with provisions for trade-offs.

II-19 It is our understanding that the estimated life of the pipeline is 40 years.

III-2 It was our understanding during the preparation of the DEIR that SOHIO indicated Hynes Terminal as the inland site and Dominguez Hills as an alternate only.

Page

III-4 Under "applicant" and "additional" mitigation, the bunker fuel is 0.5%, not 0.05%.

VI-2 According to a statistical analysis performed in the DEIR by the consultants, the ten year prediction of operational spills is 575 barrels at Long Beach which differs with the 1260 barrels per year stated in this summary.

CHAPTER 1

2 The description of the project differs from the California EIR in that the inland terminal site used by the BLM is Dominguez Hills rather than Hynes terminal. Unless the BLM has information substantiating the choice of the inland terminal site, it should use the same site for

3 comparison purposes. The Dominguez site is 166 acres, not 69 acres as reported.

1-2 4 The miles of pipeline shown here is 1026. On page 5-iii the length totals to 1033 miles while Figure 1 shows it to be 1013 miles.

1-1 5 Supertankers are generally considered to be larger than 200,000 DWT.

1-3 6 There should be notation that an expanded project, in addition to another berth, would require more storage tanks, a complete EIS and permits.

1-9 7 If each tanker requires 14 days per trip, then the number of trips per tanker would be 26.

1-29 8 The safe depth for the 165,000DWT tanker is 60 feet. The statement indicates that 42 feet is the safe depth.

1-98 9 There are four pump stations in California. Three are served by Southern California Edison and one by Imperial

Page

Valley Irrigation District.

1-99 10 Indio pump station is to be served by the Imperial Valley Irrigation District through 10.0 miles of transmission line.

1-159 The statement "the suitable dredge material from the SOHIO Project would also be used in the landfill area if it becomes an approved dump site prior to completion of the new oil terminal" is somewhat misleading. If in fact the dredge material

11 is to be placed in the new landfill area it seems that this action should be considered as part of the proposed project rather than a separate project. It was indicated to us by SOHIO during the preparation of the DEIR that none of the dredge material would be used to construct any other landfill areas within Long Beach Harbor

CHAPTER 2

2-82 Based on Open-File Report 75-596, DOI, additional study

12 should be done on Palos Verdes Fault as a potential hazard to the facility.

2-9 13 Mean Temperature--The sentence "mean January air temperature are approximately 2 to 5 degrees" needs clarification.

2-269 A comparison is made of the maximum annual concentration of SO_2 in Whittier (2.4 pphm) with the Federal primary and state

14 standards. The state standard of 4 pphm for SO_2 is a 24 hour standard. There is no state annual SO_2 standard.

2-1029 The section on "Future Environment Without the Project" states "great amounts of Alaskan crude oil will come to Long Beach

15 regardless of construction of the SOHIO pipeline" and "to accomodate this oil, additional harbor development will occur". Evidently, it is assumed that this development is inevitable

Page

15 with adoption of the Long Beach Harbor general plan. It is true that if the harbor development should occur as proposed in the general plan the impacts on circulation and flushing, along with abiotic and biotic factors, would be significant, even if the impacts of the SOHIO project alone, as proposed by the applicant, are minor.

Page

15 It should be assumed, however, that any other oil receiving projects or other development would come under the same scrutiny by the various permit agencies as the SOHIO project. The general plan itself calls for a tanker terminal at the site of the proposed SOHIO terminal, although the plan proposes a landfill terminal rather than a trestle with a breakwater. To assume that the SOHIO project might not be approved for environmental reasons but another similar project with similar or even more severe impacts would be, might not be valid. It may be better to discuss the general plan in terms of possible future changes in the existing environment subject to environmental review.

CHAPTER 3

3-76 16 0.03 is used as a factor for the wind component in the equation $V=V_c + 0.03V_w$, while Woodward-Clyde uses 0.025 in their "Evaluation of Hypothetical Spills and Their Mitigation" prepared for the Port of Long Beach.

3-80 17 Oil slick movements as shown in Figures 3.1.5.1.2-6 through 3.1.5.1.2-9 consider only currents and mean wind. Since wind becomes the primary driving force when it is above a certain minimum (approximately 2 m/sec, as estimated by Woodward-Clyde) using the mean wind as a component of the vector may be somewhat misleading. Under normal wind patterns, the wind reverses from on-shore to off-shore daily and is usually strong enough that considering only the mean wind may not be a very useful method of predicting oil spill movement.

Page

3-87 18 Explain what ranges are being referred to under "Tidal Currents".

3-91 19 Will the concrete-lined Los Angeles River Channel be crossed underground by boring?

3-96 20 Potential maximum oil spills at sensitive locations within California as predicted in the DEIR differ significantly for scenarios at Whitewater River and Colorado River sites from those in this DEIS.

3-103 21 A major oil spill at the San Andreas Fault would be about 70,000 bbl per DEIR versus 9,261 bbl per BLM's DEIS. Depths to ground water and percolation rates differ from that reported by Environmental Feasibility Studies (EFS) in the DEIR.

3-109 22 The surge tank at the Indio pump station is to be 50,000-70,000 bbl capacity per SOHIO (DEIR)

3-109 23 Table 3.1.6-2; A pollutant species of significance, especially during the construction phase, is carbon monoxide (CO) which is not listed in the table. The DEIR estimate is about 25,000 lb/day of CO to be emitted during the construction phase for the California portion of the project.

3-110 24 The last sentence of the second paragraph referring to "venting" should not be included in the discussion on ballasting. Venting is the emitting of hydrocarbons to the atmosphere from the cargo holds as a result of hydrocarbon vapor growth in the tanks caused by ambient temperature and pressure changes.

Page

3-113 25 The second paragraph mentions the DEIS differs from the DEIR in the treatment of mitigating measures for tankers not under propulsion. Assuming this refers to possible mitigation measures involving ballasting operations, the DEIR also lists as mitigation (1) use of segregated ballast systems by tankers using the terminal or (2) restricting tankers to minimum possible ballasting while in the South Coast Air Basin (only for ships without segregated ballast). (DEIR, App. A, P.A-91)

3-115 26 Last sentence of first paragraph needs to be expanded or clarified.

3-118 27 Footnote C of Table 3.1.6.1.2-1 implies expanding storage tank capacity for the expansion phase of one million barrels per day. However, the DEIS assumes the expansion phase will require no additional storage tanks nor tanker berths, only an increase in the frequency of tanker calls. In contrast, the DEIR assumes an expansion to one million barrels per day (phase II) will require one additional marine berth and eight additional storage tanks. (App XIII, Vol. 2, Part 2, DEIR)

3-121 28 (typo) National Ambient Air Quality Standard for one-hour average oxidant should be 0.08 ppm, not 0.08pphm.

3-123 29 The final CBI Report (Nov. 1976) indicates emission rates which are about 8 to 10 percent of those predicted by the API method, assuming a double seal with or without gaps. A double seal is being recommended by CBI for the proposed SOHIO storage tanks.

Page

3-126 30 According to Table 3.1.6.1.2-3, the expected frequency of three 70,000 DWT tankers ballasting simultaneously is once every 50 years, not once every 400 years.

3-127 31 Ambient oxidant levels are shown to increase two to four times on the Dominguez Hills and Pier J trajectories, between 1980 and the year 2000. Enactment of New Source Review (NSR) rules for stationary sources and other control strategies by the regulating agencies would seem to suggest a leveling off, if not improvement, in the ambient ozone concentration.

3-129 32 Third sentence of first paragraph seems to be out of place or needs clarification.

3-129 33 Do the emission rates shown on Table 3.1.6.1.2-8 take into account a reduction in SO_2 emissions for ships with an inerting system?

3-136 34 Although relatively small, hydrocarbon emissions from pumps and valve seals would add to the pipeline operational emissions.

35 The DEIS should address emissions from a potential pipeline oil spill. Such an oil spill from the pipeline could have very significant air quality impacts depending on the location of the spill, the response time to shut-down of the system and the meteorlogical conditions.

3-177 36 The breakwater would cover 26.6 acres (DEIR) versus 21 acres (DEIS)

3-253 37 Using a 5 minute shut-down period and a volume of 8,776 barrels per mile of 42" pipe, a spill of 2,825 barrels would occur at the Colorado River crossing due to pipe rupture. (Based on 700,000 bbl/day throughput and a 650'

Page

37 length of pipe across the Colorado River with valves at either side.

3-278 38 The existing natural gas line from Beaumont to the Indio Pump Station belongs to Southern California Gas Co.

3-307 39 It is estimated that a pump station would require a five month construction period using 100-130 workers.

Page

3-313 40 The distances in Table 3.1.12.1-1 are those assuming the Hynes Terminal is used. Are they the same if the Dominguez Hills site is used?

3-319 41 Needs to be clarified; will the pipeline be on the east or west side of the Los Angeles River.

3-326 42 List of parks and recreation areas impacted may not be complete. Compare with DEIR, Vol. 2, Part 2, App VII.

3-346 43 What, if anything, will be done with the exposed portions of the pipeline?

3-350 44 Port and terminal area would require approximately 90 million kwh/yr of electrical power. DEIR, Vol. 1, Part 1, P IV-25 states 100 million kwh/yr is required (87 million kwh/yr at pier J and 13 million kwh/yr at Hynes).

3-351 45 Use of 86.98 million gallons of water for testing pipeline from Long Beach terminal to Eagletail Mountain, Arizona will have considerable impact on water systems of either Long Beach or Dominguez. DEIR, Vol. 1, Part P. IV-25 states 26 million gallons of water required to test Pier J and Hynes storage tanks would cause no adverse impact. DEIR, Vol. 2, Part 2, P. IV-2 states approximately 14.3 million gallons of water would be obtained probably from L.A. for testing throughout the finished pipeline. This volume is readily available from L.A. according to DEIR, Vol. 2, Part 2, P.II-402. The DEIS on P.7-7 states 800 acre-feet (260.7 million gallons) of water used for hydrostatic testing of the pipeline. With these radically different estimates of test water volume, it may be deduced that no one really knows what hydrostatic test method will be used.

CHAPTER 4

Page

4-5 46 What by-products will be directed to holding tanks during purging

4-4 47 It is not clear from the maps in Attachment 1 which areas of high risk will have the pipe placed above-ground.

4-3 48 The use of 0.5% sulfur fuel in port by the SOHIO fleet would be an applicant committed mitigation measure.

4-11 49 All ships using Pier J will be required to burn 0.5% or less sulfur content bunker fuel for off-loading crude oil. If put into effect, the common carrier status of the terminal may effectively be in name only since only the SOHIO fleet may have the ability to utilize 0.5% sulfur bunker fuel in segregated fuel tanks.

4-12 50 Only tankers having a minimum of 20% segregated ballast will be permitted to utilize the proposed berthing facilities. Again, this would preclude use of the terminal as a common carrier facility for a great majority of tankers.

4-19 51 A mitigation measure considered as an assured commitment (by whom) is the the relocation of the pipeline to the west bank of the L.A. River flood control channel from the proposed east bank. The DEIR describes the pipeline route location on the east bank of the L.A. river control channel (Vol. 1, Part 1, Fig. I-6) Mitigation would be by segmental construction.

CHAPTER 5

Page

5-2 52 Referring to operational oil spills, the DEIS states that a statistical projection indicates an annual spill of 1,221 bbls on the ocean segment and 130 bbls in the San Pedro Bay. Page 5-21 states that 57 bbls/yr is statistically predicted at Long Beach due to project operations. In contrast, the DEIR predicts (Vol. 3, Part 3, P. 46, Table 26) 575 bbls of oil will be spilled at Long Beach over a 10 year period due to the SOHIO tanker fleet. The same amount (575 bbls) is estimated to be spilled at sea plus coastal waters.

5-7 53 At the major California faults, an earthquake could cause a 9,200 barrel oil spill. The DEIR, Vol. 2, Part 1, P.I-49 estimates a 60,000 barrel oil spill at the San Andreas Fault, Coachella Valley due to an earthquake caused ruptured pipeline.

5-11 54 Nitrogen Dioxide should be NO_2, not NO.

5-12 Sulfur Dioxide should be SO_2

5-13 55 "Hypothesizing spill sizes and spill events is essentially meaningless quantifications since the probability these events would occur, as assigned, is essentially zero." This statement might be misinterpreted by itself and a reference to the spill scenarios in Chapter 3 might be appropriate.

CHAPTER 6

Page

6-1 **56** Estimated economic life of the pipeline is 25 to 35 years. DEIR, Vol. 1, Part 1, P. VIII-1 states the useful life of the project is about 40 years, based on information furnished by SOHIO.

6-12 **57** Pipeline access roads would provide additional access for motorized recreationists. On P. 4-51 a mitigation proposed will have gates installed on all maintenance roads to prevent unauthorized access, to prevent unnecessary vehicular access and reduce vandalism. This is a contradiction; which viewpoint is correct?

6-13 **58** Under options foreclosed for future uses of man's environment, no mention is made of the effects on the successful live-bait anchovy fishery within the harbor (DEIR, Vol. 1, Part 1, P. 11-18).

CHAPTER 7

7-8 **59** SOHIO tanker fleet will consume 8,045 bbls/day bunker fuel in transportation from Valdez to Long Beach, including unloading. As developed from data contained in DEIR, Vol. 1, Part 1, P. A-50 & A-55, the SOHIO tanker fleet will consume 6,909 bbl/day travelling round-trip between Valdez and Long Beach and 363 bbl/day unloading for a total of 7,272 bbl/day fuel consumption.

CHAPTER 8

Page

8-15 **60** "The total round-trip distance from Valdez to the Gulf Coast is approximately 31,000 nautical miles. During such a voyage, a 220,000 DWT tanker would consume about 90,000 barrels of bunker fuel or about 0.065 barrels of bunker fuel per barrel of crude oil delivered." The DEIR, Vol. 3, Part 2, P. III-15 states the round-trip distance is 39,000 miles and about 15 barrels of crude delivered for each barrel of bunker fuel consumed which is approximately 7.4% of the energy delivered.

8-19 to 8-66 The DEIS information pertaining to Ports-of-Entry and Routing Alternatives appear to have been predominantly derived from the DEIR, Vol. 3, Part, (Alternative Study)

ENERGY SUPPLY AND DEMAND

61 (1) One important energy supply and demand issue raised by the SOHIO Project is the extent of the future West Coast crude oil surplus as a result of North Slope production. An estimate of this surplus is important in establishing the necessity of the project and in comparing it to possible alternatives. The only figures in the DEIS for the West Coast oil surplus are an array of estimated PADD V surpluses made by various private companies and consulting firms (2-1062) It would be helpful if the DEIS included an estimate of the future PADD V crude oil surplus based on BLM's figures and assumptions for PADD V energy supply and demand.

62 (2) Another important supply/demand issue of the SOHIO Project is the possibility that abandonment of natural gas lines to California will threaten the availability of natural gas in California. The DEIS discusses this issue and concludes (with one unlikely exception, p. 3-394) that abandonment of one thirty-inch natural gas pipeline would have no impact on California's gas supply status. However, in the Executive Summary (1-38) the DEIS mentions the possibility of abandoning a second thirty-inch natural gas pipeline to expand the capacity of the project. Although it is understood that such an expansion is considered a separate action necessitating additional permits and environmental assessment, the gas supply issue is so important to the people of California that the impact of the abandonment of a second gas line on deliverability of natural gas to California should be discussed in the DEIS.

63 (3) The Business-as-usual (BAU) supply projection uses a $13 world oil price assumption as the most likely price through 1989. Such a figure should be justified, as other estimates have been quite different. For example, A.D.Little, in the DEIR, Vol 3, Part 1, P. 35-40, project the following future prices for delivered crude oil to the U.S., under their Intermediate Price Case assumptions:

1975	1980	1985
$10.71	$14.55	$25.09

The assumptions behind the DEIS's $13.00 figure should be given.

64 (4) The magnitude of Alaskan oil development described in the DEIS as "Business-as-usual" seems far from that. In numerous parts of the DEIS, the BAU Supply scenario is described as "a massive exploratory and developmental effort" (2-1011), "far from the status quo" (2-990), etc. The Alaskan production figures resulting from this "BAU" scenario are significantly higher than most other estimates of future Alaskan production:

Million BBL/day

	DEIS	A.D.L.	Others (from F.E.A.)*
1980	2.0	1.76	1.7--1.8
1985	3.1	2.6	1.9--2.7

An explanation of this "far from status quo" "Business-as-usual" Alaskan oil development appears to be necessary.

65 (5) The DEIS contradicts itself on the issue of potential future TAPS expansion. In the Executive Summary (I-6), it states "...Alyeska pipeline Company does not anticipate increasing the flow beyond 1.2 million BPD without additional pumps. No schedule presently exists for pumping at the 2 million BPD capacity figure." However, one of the assumptions under BAU supply outlook (2-962)

*North Slope Crude--Where to? How?, FEA, 1976

65 is "Alaskan pipeline capacity--2.0 mmbpd in 1980; 2.5 mmbpd in 1985." This contradiction should be cleared up.

66 (6) The DEIS also contradicts itself on the possiblility of insufficient natural gas pipeline capacity to California. On p. 3-393, it is stated that under the five DEIS gas supply scenari the abandonment of the thirty-inch pipeline would have no impact on the natural gas supply operations to California. On p. 3-394, it states that "under the Arctic gas/Midwest scenario (one of the five scenarios mentioned above), a deficit in natural gas pipeline capacity does appear with the abandonment of an existing 30-inch Permian Basin line." The conditions of this potential deficit should be discussed more fully in the main DEIS (although this is done in Vol. 8, the Energy Supply/Demand volume (p. 98-101) that study is poorly organized and not readily available to the public.)

67 (7) In discussing the natural gas pipeline capacity to California, the DEIS fails to consider the possibility of reinforcing existing pipelines to expand capacity in the face of capacity deficits as is done in the DEIR (Vol. 9) and FEA (271).*

*North Slope Crude--Where To? How?, FEA, 1976

SOCIO-ECONOMIC

68 (1) P.3-354 tanker crews-- The DEIS states that 800 crew members would be hired to man the 14 tankers. The DEIR, on the other hand gives a figure of 323 employees to man the 11 SOHIO tankers (Vol.1-2, P. IV-75) One possible reason for this disagreement could be the BLM's assumption that half of the crew members would be working while half were on leave. Socio Economic Systems assumption is that for a crew of 28, seven would be on stand-by.

69 (2) It is mentioned several times in the DEIS that construction time for the Long Beach portion of the project would be 16 months. (3-362, 3-363) According to the DEIR, the construction time will be 25 months.

70 (3) Page 3-362--The DEIS states that "In California there will be approximately 2,000 construction workers" under the heading "Long Beach area, Construction Phase". Is this figure for the Long Beach terminal or California total? The DEIR says, for Long Beach terminal, the total number of workers involved will be approximately 960 and for the pipeline (in California) 1,738 jobs will be generated during the construction phase.

71 (4) The DEIS fails to describe the impact of the SOHIO Project on the property tax revenues of the areas it traverses. On p.3-369, it states that taxes generated by the project are "not quantifiable" However, they are quantified in detail in the DEIR, and prove to be significant, especially in the Long Beach/Los Angeles area.

72 (5) The DEIS, in its employment figures, fails to estimate "indirect employment" of the project, i.e., indirect effects of consumption spending by employees and direct spending by the operators of the project.

73 (6) The Socio-economics section does not discuss the economic cost or benefit of the pipeline conversion to California gas consumers.

74 (7) P. 2-964--footnote a, Something is missing.
(8) P. 2-982--CO_2 ??
(9) P. 2-1022--between paragraphs 2 and 3, something is missing.

AIR QUALITY APPENDIX

Page

A-53 75 Table A1.1.1-2 The amount of segregated ballast is 20% for the 80,000 DWT and 36% for the 120,000 DWT and 165,000 DWT tankers.

A-284 76 Table A3.1.6.1-7 The reactive fraction for crude oil vapor should be 88.3 rather than 83.3.

A-285 77 Table A3.1.6.1-8 Annual cargo (million bbl) for the 80,000 DWT tanker should be 56.77 rather than 46.77.

A-285 78 It is stated that the worst case 1980 fleet would incorporate three additional 70,000 DWT non-SOHIO tankers. However, Table A3.1.6.1-9 shows four 70,000 DWT tankers (non-SOHIO).

TANKER TRAFFIC STUDY

Page

19

79 The differenes in the estimates for operational spills between this study (DEIS) and Socio-Economic-Systeme study (DEIR) appear to be due to the fact that 300 vessel calls per year are anticipated as compared to 267.

-21-

ATTACHMENT 1-MAPS

Page

1

80 Hynes Terminal is shown as Option 1 and Dominguez Hills as Option 2 on the maps. However, in the DEIS discussion very little is written about the Hynes Terminal as the inland site as proposed by SOHIO.

4

81 There is a transmission line to the Indio Pump Station that is not shown on this map.

-22-

RESPONSE

Comment #1

The Tanker Traffic Study has been expanded and incorporated in Appendix A1.1.1.1-A of the FES. Relevant findings and conclusions from the remaining studies are discussed in the various sections of the FES. See the Table of Contents in Chapter 1 for a listing of where these studies are located.

Comments #2 and #3

Dominguez Hills site has been designated by the applicant as the inland terminal; it will utilize 69 acres of land. See Sections 1.0 and 1.1.1.1, under Details of California Route.

Comment #4

The correct mileage of the pipeline from Long Beach to Midland is 1,026.6 miles and has been corrected throughout the statement.

Comment #5

The word supertanker has been deleted from Section 1.0.

Comment #6

Expansion of the pipeline system has been addressed in Section 1.0.

Comment #7

The number of trips for each tanker is that proposed by the applicant and was not changed. See Section 1.0.

Comment #8

The depth of water for safe operations of the 165,000 DWT tankers is 62 feet and has been corrected in Section 1.2.2.1, under Dredging.

Comment #9

The applicant has stated that, pending negotiations, Southern California Edison will service the Port of Long Beach, Dominguez Hills, and the three other pump stations in California. This is addressed in Section 1.2.3.2, under California.

Comment #10

See Comment 9 above and Section 1.2.3.2, California.

Comment #11

This statement has been corrected as not being part of the proposed SOHIO project. See Section 1.4.2.3, under City and County Plans and Programs.

Comment #12

Section 2.1.3.3.1, under Seismicity, has been revised to reference Table 2.1.3.3.2-1 which describes the Palos Verdes fault as active and capable of generating a magnitude 7 earthquake.

Comment #13

The paragraph was removed from the FES.

Comment #14

Section 2.1.6.2, under Oxides of Sulfur, has been changed to reflect this comment.

Comment #15

The proposal by SOHIO is for an inland terminal, conversion of natural gas pipelines, construction of new pipeline, pump stations, and ancillary power lines, and a Midland, Texas, terminal, as well as a marine terminal. Hence, the proposal involves environmental impacts and permits beyond those of only a marine terminal.

Comment #16

The best available analysis methodologies were employed in the preparation of the FES; no text change was believed to be warranted.

Comment #17

The land/sea breeze effect is a local meso-scale meteorological event and would not necessarily affect oil slick movement outside the influence of this wind circulation system. No text changes were believed to be necessary.

Comment #18

It is explained in Section 3.1.5.1.2, under Port Area, that the tidal ranges are those which are shown on Figure 2.1.5.1.3-1.

Comment #19

The Los Angeles River crossing would be a new aboveground crossing; see Table 1.2.3.2-2.

Comment #20

After reanalysis of data, no change was deemed necessary.

Comment #21

The DEIR and DEIS are complete and separate documents. They were prepared using different assumptions and analysis methods. The text on this subject was reanalyzed and no changes were believed to be warranted.

Comment #22

The comment was noted, but no change was made.

Comment #23

Appendix A3.1.6.1 in the FES lists total emissions estimated from all sources. The discussion on impact of carbon monoxide due to construction has been revised and expanded in Section 3.1.6.1.1 to include the impact attributable to vehicles.

Comment #24

The sentence has been deleted in the FES.

Comment #25

The paragraph has been deleted in the FES.

Comment #26

The sentence has been deleted in the FES.

Comment #27

All references to air quality impacts from an expansion mode have been deleted. Expansion of the facilities would require additional environmental assessment and permits.

Comment #28

The text in Section 3.1.6.1.2, under Oxidant Impacts, has been changed to reflect this comment.

Comment #29

Text references to the CBI report in the FES have been updated. Reference is also made in the FES to the study by Engineering-Science, Inc. for the Western Oil and Gas Association.

Comment #30

The probability given in the DES (400 years) is lower than the one in the table. The lower probability in the text was based on the additional conditions that ballasting occurred during evening or morning hours during meteorological conditions likely to result in exceeding the oxidant standard downwind. Analysis and discussion of event probabilities were substantially revised in the FES. Details of calculations are presented in Appendix A3.1.6.1.

Comment #31

The industrial growth figures in the report are taken from data obtained from the California Air Resources Board and are high estimates. The DES employed best available data. The modeling of oxidant in year 2000 was removed and replaced with a new discussion in Section 3.1.6.1.2 of the FES.

Comment #32

The text in Section 3.1.6.1.2, under Sulfur Dioxide, has been changed to reflect this comment.

Comment #33

The table takes this into account.

Comment #34

All estimated emissions are tabulated in Appendix A3.1.6.1.

Comment #35

See Table 3.1.5.2.2-1 and related text in Section 3.1.5.2 and in Section 5.6.2, under Probability of Oil Spills and Leaks.

Comment #36

This figure was checked and 21 acres was found to be the correct figure for benthic habitat lost.

Comment #37

Section 3.1.8.2.2 has been clarified by including additional data used to derive the figure given. No change in the spill volume figure was necessary.

Comment #38

Section 3.1.9.2.2 has been substantially revised and this statement has been deleted.

Comment #39

Section 3.1.11.2.1, under Pump Stations, has been changed to reflect this comment.

Comment #40

This table is correct and would be the same for either Hynes or Dominguez Hills.

Comment #41

The pipeline would be on the west side of the Los Angeles River as described in Chapter 1 in Section 1.1.1.1, under Details of California Route.

Comment #42

After checking recreation areas in the California DEIR (Volume 2, Part 2, App. VII), no changes in the FES were believed to be warranted.

Comment #43

The applicant has not clarified this matter at this writing. However, no significant adverse impacts have been identified, assuming normal pipeline design procedures for exposed pipe would be followed.

Comment #44

The text in Section 3.1.15.1 has been changed to state the port and terminal area would require approximately 100 million kwh/yr of electrical power.

Comment #45

Section 3.1.5.1 has been revised to reflect the Hydrostatic Test Plan presented in Section 1.2.2.1, and in Table 1.2.3.2-26 and Appendix A1.2.3.2.

Comment #46

Section 4.1.1 has been clarified in the FES.

Comment #47

Areas of high risk, designated on Attachment 1, do not imply that a special pipeline arrangement will be incorporated. The only special pipeline configuration planned will be the San Andreas fault crossing near Indio, California.

Comment #48

The applicant's committed mitigating measure for burning 0.5 percent fuel in port was inadvertently left out of the DES and was included in Section 4.1.5 of the FES.

Comment #49

The BLM believes this is a valid mitigating measure. Retrofitting of tankers could be accomplished to meet the mitigating measures. The impacts identified in Chapter 5 reflect use of the facilities by all tankers under the revised mitigating measures.

Comment #50

See response to Comment 48 above.

Comment #51

This mitigating measure has been deleted. The proposal now is to route the pipeline along the west bank of the Los Angeles River flood control channel. See Section 1.1.1.1, under Details of the California Route.

Comment #52

The reference to 57 barrels has been changed to 130 barrels in Section 5.8.1, under Marine and Estuarine Birds.

Comment #53

See response to Comment 20 above.

Comment #54

These errors have been corrected in the FES.

Comment #55

This statement has been deleted from the FES.

Comment #56

Based on information from the applicant, an approximate period of 25-35 years was determined to be the life of the project.

Comment #57

The cited mitigating measure was deleted in the FES.

Comment #58

Section 6.2.2 has been revised to reflect this comment.

Comment #59

The figures presented in Chapter 7 are believed to be correct, based on available information.

Comment #60

The figures were reanalyzed and no text change was believed to be necessary.

Comment #61

The data presented in the energy supply and demand section represent the best available data and are representative of the anticipated crude oil surplus scenarios.

Comment #62

The impacts of the abandonment of a second 30-inch natural gas line would be the subject of a new and separate ES. Expansion is not in the scope of this ES.

Comment #63

The business-as-usual supply projection is an assumed scenario based upon 1975 dollars. The information is based upon an FEA document, Federal Energy Outlook, dated 1976.

Comment #64

The best available data were employed in the DES and FES. Available data present a wide range of estimates of the magnitude of anticipated Alaskan oil development. These figures are from the National Energy Outlook, 1976, prepared by the Federal Energy Administration.

Comment #65

The increased pipeline capacity would occur with additional pumps. There is no contradiction.

Comment #66

Section 3.1.16.5, under Natural Gas, has been revised to correct this contradiction.

Comment #67

The DEIR, FEA report, and this ES are complete and separate documents. The assumptions and analysis methods employed in each report are also different. No text changes in the FES with regard to this question were believed to be warranted.

Comment #68

SOHIO Transportation Company has indicated that tanker crews will work for six months out of every year and take the remaining time as vacation; hence, the necessity for two crews per ship.

Comment #69

Section 3.1.16.2, under Conversion/Construction, has been revised to be consistent with Figure 1.1.2.1-1.

Comment #70

Please refer to Comment 68 above. Tables 1.2.3.2-4, -7 and -10 state 2,000 construction workers would be used in California. This figure does not include personnel required for the marine terminal construction.

Comment #71

Section 3.1.16.2 has been changed to reflect the relatively small revenue accruing to the City of Long Beach and Los Angeles County.

Comment #72

These figures are too small for analysis. Rather, an analysis on the interindustry linkages was performed to determine which industrial sectors would most benefit from construction of the proposed project.

Comment #73

An economic cost-benefit study is considered outside the scope of this environmental analysis.

Comment #74

Table 2.1.16.5-2, Section 2.1.16.5, under Enhanced Recovery, and Section 2.1.16.5, under West Coast Oil Refining, have been corrected to reflect this comment.

Comment #75

Table A1.1.1.1-2 in the FES Appendix has been revised to reflect this comment.

Comment 76

The error has been corrected in the FES.

Comment #77

The text was corrected in the FES.

Comment #78

The text has been corrected in the FES.

Comment #79

The issue has been discussed in the Appendix A1.1.1.1-A, Tanker Traffic Study.

Comment #80

Dominguez Hills has been selected as the site of the inland terminal for the SOHIO project and is addressed in Chapter 1, Section 1.1.1.1, under Details of the California Route. Reference to the Hynes terminal has been deleted in the map volume.

Comment #81

This has been corrected on Attachment 1, Maps.

STATE OF NEW MEXICO

STATE PLANNING OFFICE

GREER BUILDING
505 DON GASPER
SANTA FE, 87503
(505) 827-2073

GRACIELA (GRACE) OLIVAREZ
STATE PLANNING OFFICER

JERRY APODACA
GOVERNOR

January 10, 1977

Project Manager
Bureau of Land Management
EIS Project Office
P.O. Box 660
Los Alamitos, California 90720

RE: Draft Environmental Statement for Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (As Proposed by SOHIO Transportation Company)

Dear Sir:

Attached you will find comments regarding the draft environmental statement from the State of New Mexico Cultural Properties Review Committee, the Department of Game and Fish, the State Park and Recreation Commission, the Historic Preservation Program, and the State Engineer Office. The State Planning Office, of course, endorses and supports the comments from these State Agencies.

Our review has revealed two minor discrepancies in the draft environmental statement text, to which we call your attention:

Executive Summary, page III-8, paragraph 4--In discussing water quality, the draft environmental statement says, "Also, some sedimentation would occur downstream from construction at stream crossings. The Colorado, Rio Grande, and Pecos Rivers are subject to the greatest threats from sedimentation." This seems to imply that construction would take place on the Rio Grande River; however, other references to the Rio Grande crossing imply or state that this crossing presently exists (e.g. Table 1.2.3.2-2, page I-59, Chapter 1). Perhaps, this should be clarified.

1 Chapter 1, page 1-65, Pump stations--This section refers to a list of pump stations on Table 1.2.3.3-1. That Table actually

1 shows the "Personnel Required for Operation and Maintenance of West Coast Terminal Facilities."

Although the proposed Crude Oil Transportation System appears to be the most reasonable alternative, we must also recognize the potential environmental impacts and hazards. We, therefore, urge the implementation of the mitigating measures contained in Chapter 4, Sections 4.2.5 thru 4.2.9 (pages 4-42 thru 4-61).

The State of New Mexico Environmental Improvement Agency will submit comments under separate cover directly to the Project Manager since they were unable to meet the State Clearinghouse deadline.

Thank you for the opportunity to review and comment on the subject draft environmental statement.

Sincerely,

Jack M. Mobley

Jack M. Mobley, Planner II
Division of Natural Resources

JMM:anne

Enclosures-5

STATE OF NEW MEXICO

STATE PLANNING OFFICE

GREER BUILDING
505 DON GASPER
SANTA FE, 87503
(505) 827-2073

GRACIELA (GRACE) OLIVAREZ
STATE PLANNING OFFICER

JERRY APODACA
GOVERNOR

January 10, 1977

Mr. Chuck Tulloss, Project Manager
Sohio Project
P. O. Box 660
Los Alamitos, California 90720

Dear Mr. Tulloss:

Thank you for the opportunity to comment on the draft environmental impact statement on the proposed crude oil transportation aytem between Valdez, Alaska and Midland, Texas. My comments concern cultural resources in New Mexico.

The DES adequately describes the general nature of direct and indirect effects on cultural resources in the areas in question. (3-273ff.). It also gives a complete list of registered historic sites in the affected area in New Mexico (2-733). However, as the DES points out "site inventory data is inadequate" (3-274) and further archeological/historical surveys must be performed (4-6).

The discussion of possible effects recognizes that in a project of this sort, indirect effects may be as damaging, or more damaging, than direct effects.

Future archeological survey reports having to do with the project should examine the question of indirect effect and make specific recommendations with regard to it. I will expect to review the reports as they appear, and to consult the Bureau of Land Management to determine the disposition of any site to be directly or indirectly affected.

Sincerely,

Thomas W. Merlan

Thomas W. Merlan
State Historic
Preservation Officer

TWM*liz

MEMORANDUM

December 22, 1976

TO: Warren Hart, Division of Natural Resources, State Planning Office

FROM: F. R. Allen, Chief, Technical Division State Engineer Office

SUBJECT: Environmental Impact Statement, Crude Oil Transportation System: Valdez, Alaska to Midland, Texas

We have reviewed the subject impact statement and offer the following comment:

2 Chapter 3 Environmental Impacts of the Proposed Action, page 3-37, last paragraph. The hydrostatic test will require 800 acre-feet of water to be obtained along the pipeline route. If water for this purpose is removed from declared underground water basins or from surface sources in New Mexico the acquisition must be in accordance with State Engineer rules and regulations.

F. R. Allen

FRA*pat

State of New Mexico

GOVERNOR
JERRY APODACA
DIRECTOR AND SECRETARY TO THE COMMISSION
WILLIAM S. HUEY

STATE GAME COMMISSION
F. URREA, JR., CHAIRMAN ALBUQUERQUE
EDWARD MUNOZ GALLUP
ROBERT H. FORREST CARLSBAD
J. W. JONES ALBUQUERQUE
ROBERT P. GRIFFIN SILVER CITY

DEPARTMENT OF GAME AND FISH

STATE CAPITOL
SANTA FE
87503

January 6, 1977

Mr. Warren Hart
Division of Natural Resources
State Planning Office
505 Don Gaspar
Santa Fe, New Mexico 87503

Dear Mr. Hart:

We have reviewed the Draft Environmental Statement, Crude Oil Transportation System: Valdez, Alaska to Midland, Texas as proposed by SOHIO Transportation Company and wish to make the following comments:

In the State of New Mexico the crude oil will be transported by using an existing pipeline and four new pumping stations, each requiring ten acres of land will be constructed. Therefore, minimal impacts upon wildlife and wildlife habitat can be expected from construction activities. However, as the pipeline crosses the Rio Grande and Pecos Rivers, the potential for a pipeline break and pollution of the rivers will exist for the lifetime of the project. Because of this, we would encourage caution in construction of the new Pecos crossing and in monitoring both crossings to prevent possible breaks in the line. 3

Sincerely yours,

William S. Huey
Director

CULTURAL PROPERTIES REVIEW COMMITTEE

Jerry Apodaca
Governor

Albert H. Schroeder, Chairman
John P. Conron, Vice-Chairman
Dr. Myra Ellen Jenkins, Secretary
George C. Pearl

Thomas W. Merlan
Historic Preservation Officer

Stewart L. Peckham
Dr. Marc Simmons
Dr. Spencer Wilson

January 5, 1977

State Planning Office
Division of Natural Resources
505 Don Gaspar
Santa Fe, New Mexico 87501

Attention: Mr. Mobley

Dear Mr. Mobley

In reference to the Bureau of Land Management's Draft Environmental Impact Statement pertaining to the Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (As Proposed by the SOHIO Transportation Company), there are possibilities of both direct and indirect impact on archeological resources in New Mexico even though much of the pipeline in question is already in the ground.

To what extent the proposed system might have on archeological and historical sites is impossible to say at this time. Although the Environmental Impact Statement acknowledges that the pipeline passes through areas known to have archeological concentrations, there are no existing inventories of sites that meet current archeological or historic preservation standards. Archeological surveys should certainly be made in areas of anticipated surface disturbance, i.e., in the vicinities of pump stations, various valve locations, proposed transmission lines, river crossings, and access routes to all of these. Additionally, an archeological survey should be made along the proposed right-of-way from south of Jal, New Mexico to the New Mexico-Texas border--as well as beyond. 4

Presumably, the entire route of the pipeline will be traversed at one time or another by construction or service vehicles, so that even areas not to be affected by the above-mentioned surface disturbance might see inadvertent disturbance. Under the circumstances, an archeological survey of the entire length and width of the right-of-way is recommended in addition to the surveys recommended above. 4

Hopefully, no cultural properties will be adversely affected, but without a survey by qualified archeologists, this cannot be assured given available data.

Sincerely

Stewart L. Peckham
State Archeologist

Room 403 Executive - Legislative Building, Santa Fe, New Mexico 87503

NEW MEXICO
STATE PARK AND RECREATION COMMISSION

JERRY APODACA
GOVERNOR

SAM GRAFT
DIRECTOR

141 E. DE VARGAS
P. O. BOX 1147
SANTA FE, NEW MEXICO 87503
(505) 827-2726

December 13, 1976

Mr. Warren Hart
Division of Natural Resources
State Planning Office
505 Don Gasper
Santa Fe, New Mexico 87503

Dear Warren:

After reviewing the Draft Environmental Impact Statement entitled: "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas," I see no direct impacts on State Parks in New Mexico.

However, the project does anticipate possible impact on the endangered cactus, Opuntia arenaria, in the Anthony, New Mexico area. (See pages 2-410, 3-169, 4-45.) If removal of this cactus becomes necessary to site the pipeline, the State Park and Recreation Commission would be interested in obtaining any displaced cacti for display and care at Living Desert State Park, Carlsbad, New Mexico. Park personnel are willing to drive to the site to pick up the affected individual cacti.

It is my feeling that donation of these cacti to the state can be considered an additional mitigating measure for the adverse impact of removing these endangered cacti from their habitat. 5

Sincerely,

DAVID JOHNSON
PLANNER

DJ:ra

RESPONSE

Comment #1

This section has been revised to reflect the correct section and table number.

Comment #2

The New Mexico State Engineer Office has been added to Section 1.3.2.3.

Comment #3

Comment was noted but no text change was made.

Comment #4

As discussed in Section 4.2.8, surveys will be conducted along all areas of construction prior to the issuance of permits. Because vehicular travel along the existing gas pipeline to be converted would utilize existing access and maintenance roads and trails, a survey of the entire route was not believed to be needed.

Comment #5

Because donation of plants implies that construction would necessarily impact plants, it was believed that such mitigation would be best determined during the agency evaluation discussed in Section 4.2.5.

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT AGENCY
P. O. BOX 2348, SANTA FE, NEW MEXICO 87501
HEALTH and SOCIAL SERVICES department

January 10, 1977

Mr. Charles R. Tulloss
Project Manager
Bureau of Land Management
SOHIO EIS Project
P. O. Box 660
Los Alamitos, California 90720

Dear Mr. Tulloss:

Our staff has reviewed the draft environmental impact statement for the proposed SOHIO Project.

We believe that if proper design and construction measures are employed; no substantial adverse environmental impacts will result from this project in New Mexico.

We thank you for the opportunity to review and comment.

Sincerely,

Thomas E. Baca
Director, EIA

TEB/io

OFFICE OF THE GOVERNOR

DOLPH BRISCOE
GOVERNOR

February 4, 1977

Mr. Charles R. Tulloss, Project Manager
Bureau of Land Management
EIS Project Office
P.O. Box 660
Los Alamitos, California 90720

Dear Mr. Tulloss:

The Draft Environmental Impact Statement "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (As Proposed by SOHIO Transportation Company)," has been reviewed.

Governor Briscoe supports any and all feasible means of bringing additional sources of energy to Texas. This policy is the best way of securing adequate supplies of energy in the future at reasonable cost to the people of Texas.

If this Office can be of further assistance, please contact us.

Sincerely,

Charles D. Travis, Director
Budget and Planning Office

Enclosures

EXECUTIVE OFFICE BUILDING • 411 WEST 13TH STREET • AUSTIN, TEXAS 78701

TEXAS WATER RIGHTS COMMISSION
STEPHEN F. AUSTIN STATE OFFICE BUILDING

COMMISSIONERS
JOE D. CARTER, CHAIRMAN 475-3483
DORSEY B. HARDEMAN 475-4335
JOE R. CARROLL 475-2481

December 23, 1976

R. E. (BOB) SCHNEIDER
EXECUTIVE DIRECTOR 475-2463
MARY ANN HEFNER
SECRETARY 475-6614

RECEIVED
DEC 29 1976
Budget/Planning

Mr. Charles D. Travis, Director
Governor's Budget & Planning Office
411 West 13th Street
Austin, Texas 78701

Attention: Mr. John Gosdin

Re: U.S. Department of the Interior, Bureau of Land Management -- Draft Environmental Impact Statement, Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (As Proposed by SOHIO Transportation Company). (Received December 3, 1976).

Dear Mr. Travis:

In response to the request in your memorandum of December 2, 1976, the Commission staff has reviewed the referenced draft document. The following comments are furnished for your consideration in preparing the position statement of the State of Texas relative to the referenced document:

1. The Commission staff reaffirms the comments submitted in letter of September 21, 1976, to Mr. Charles R. Tulloss, Project Manager, U.S. Department of the Interior, Bureau of Land Management, SOHIO EIS Project, relative to the preparation of the referenced draft document. Attached is a copy for your ready reference.

2. Based on our analysis of Chapter 8 (Alternatives to the Proposed Action) of the Draft Environmental Impact Statement (DEIS) and the discussion contained on pages S 16192 thru S 16198 of the September 20, 1976, Congressional Record,

AN EQUAL OPPORTUNITY EMPLOYER
P. O. BOX 13087 AREA CODE 512 AUSTIN, TEXAS 78711

Mr. Charles D. Travis
December 23, 1976
Page 2

we believe that the proposed SOHIO project to convert and reverse an existing El Paso Natural Gas pipeline and build necessary connecting pipelines from Long Beach, California to Midland, Texas, appears to be the most feasible plan of action to route expected surplus of crude oil from the Fifth Petroleum Administrative Defense Department (PADD) to crude-deficient areas east of the Rocky Mountains.

3. The referenced document (see Chapter 1, Section 1.3.2.4, pages 1-150 thru 1-152 of the DEIS) reflects adequate recognition of specific permits required in the State of Texas for the proposed construction project. There is general agreement that there will be no significant impacts on water rights; and that SOHIO is cognizant of current Commission rules covering the diversion and appropriation of State water for pipeline and related facilities construction, maintenance, and operation.

4. The staff believes that the referenced comprehensive document adequately fulfills the analytical and coordinative requirements of the National Environmental Policy Act of 1969.

We appreciated the opportunity of reviewing this vital document which appears to provide a feasible solution to the handling of surplus crude oil expected in PADD V starting in mid-1977. If we can be of further help please notify us; and, if you have any questions on the preceding comments notify Dr. Alfred J. D'Arezzo, Analyst for Environment and Interagency Coordination, phone: (512) 475-2678.

Very truly yours,

TEXAS WATER RIGHTS COMMISSION

Robert E. Schneider
Executive Director

RES-AJD:ll

Attachment
As stated.

TEXAS WATER RIGHTS COMMISSION
STEPHEN F. AUSTIN STATE OFFICE BUILDING

COMMISSIONERS
JOE D. CARTER, CHAIRMAN 475-3483
DORSEY B. HARDEMAN 475-4335
JOE R. CARROLL 475-2481

September 21, 1976

R. E. (BOB) SCHNEIDER
EXECUTIVE DIRECTOR 475-2463
MARY ANN HEFNER
SECRETARY 475-6614

Mr. Charles R. Tulloss, Project Manager
U.S. Department of the Interior
Bureau of Land Management
SOHIO EIS Project
P. O. Box 660
Los Alamitos, California 90720

Re: U.S. Department of the Interior, Bureau of Land Management, Preparation of Draft Environmental Impact Statement for Crude Oil Transport Systems from Valdez, Alaska to Midland, Texas.

Dear Mr. Tulloss:

This is in reply to your letter of September 10, 1976, (your file reference: 1792(CA-970)), to Chairman Joe D. Carter, requesting comments on the proposed mitigation measures relative to the referenced proposed project insofar as that portion which will be constructed in Texas. The mitigation measures discussed in Section 4.2.3.4, Texas, involve matters beyond the direct, statutory jurisdiction of the Texas Water Rights Commission to design, construct, or regulate. However, from the viewpoint of furthering basic State objectives of natural resources conservation and management, and safety, the Commission supports such proposed measures as: 1.) the installation of water bars on slopes of from 15 percent to 45 percent and a sustained length of 200 feet or more, in order to impede soil erosion and to concentrate runoff in collection basins to conserve limited precipitation; 2.) the restoration of water diversion or containment levees and ditches to their original compaction and configuration following construction; and, 3.) general restabilization of disturbed natural drainage systems. We support such measures because we believe that they are beneficial to the protection of existing surface water rights and also safeguard any existing unappropriated State of Texas waters in the pipeline project corridor and terminal facility area in Texas.

AN EQUAL OPPORTUNITY EMPLOYER
P. O. BOX 13087 AREA CODE 512 AUSTIN, TEXAS 78711

Mr. Charles R. Tulloss
September 21, 1976
Page 2

We shall be happy to review the Draft Environmental Impact Statement upon our receipt thereof later this year, as you indicate. If we can be of further assistance, please let us know (notify: Dr. Alfred J. D'Arezzo, Analyst for Environment and Interagency Coordination, phone -- 512-475-2678).

Very truly yours,

TEXAS WATER RIGHTS COMMISSION

Robert E. Schneider
Executive Director

RES-AJD:ll

TEXAS INDUSTRIAL COMMISSION

714 Sam Houston State Office Building 512-475-4331 Box 12728, Capitol Station, Austin, Texas 78711 Telex No. 776-488

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Executive Director

MEMORANDUM

RECEIVED
DEC 10 1976
Budget/Planning

TO: John Gosdin
Natural Resources Section

FROM: Phyllis Procter, Manager
Research and Program Development Dept.

SUBJECT: Draft Environmental Impact Statement for the Crude Oil Transportation System from Valdez, Alaska, to Midland, Texas (As Proposed by Sohio Transportation Company)

DATE: December 9, 1976

The Texas Industrial Commission has no negative comments. There seem to be no significant drawbacks to the Texas-related portion of this project. The east/west conversion of the El Paso Natural Gas Pipeline and the addition of pump stations appear innocuous.

Since exceptions to complete utilization of existing pipelines would only be approximately 36 miles of the New Mexico portion, much cost is curtailed.

The linkage with and addition of 73.1 miles of 42" pipeline from Jal, New Mexico, to Midland, Texas, will create a temporary increase of approximately 396 construction-related jobs in the area.

kmp

1386

EDMUND L. NICHOLS
Assistant Commissioner

December 16, 1976

RECEIVED
DEC 17 1976
Budget/Planning

Mr. H. Anthony Breard, Coordinator
Natural Resources Section
Budget and Planning Office
Office of the Governor
Executive Office Building
Austin, Tx 78701

Dear Mr. Breard:

This is in response to your letter of December 2, 1976 regarding the Draft Environmental Impact Statement for the Crude Oil Transportation System from Valdez, Alaska to Midland, Texas.

We have reviewed this multi-volume DEIS. Although occasionally redundant, it is very comprehensive and seems to be accurate in its description of the proposed action and the possible environmental impacts.

The recommended alternative is clearly the one which moves the Alaskan oil to places it will be most usable and nearest to redistribution lines. The environmental impact appears to be acceptable.

We appreciate the opportunity to comment on the plans for this important project.

Sincerely,

Edmund L. Nichols

ELN/hp

THIS PAPER IS MADE FROM COTTON A PRINCIPAL CROP OF TEXAS
Texas Department of Agriculture, John C. White, Commissioner, P.O. Box 12847, Austin, Texas 78711

1387

TEXAS STATE SOIL AND WATER CONSERVATION BOARD

1009 First National Building
P. O. Box 658
Temple, Texas 76501
Area Code 817, 773-2250

December 23, 1976

RECEIVED
DEC 30 1976
Budget/Planning

Mr. H. Anthony Breard, Coordinator
Natural Resources Section
Budget and Planning Office
411 West 13th Street
Austin, Texas 78701

Dear Mr. Breard:

You have forwarded a draft environmental impact statement for the Crude Oil Transportation System from Valdez, Alaska, to Midland, Texas (as proposed by SOHIO Transportation Company).

1 The draft statement adequately discloses limiting soil factors, erosion and sediment run-off, and the impact on agricultural lands. However, we suggest that contractors for SOHIO contact local agricultural and conservation official for assistance. This we believe, would allow reclamation work to be based on more timely decisions, hopefully resulting in a reduced time required for revegetation.

Thank you for the opportunity to review this draft statement.

Sincerely,

Harvey Davis
Executive Director

HD/lc

TEXAS WATER DEVELOPMENT BOARD

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EXECUTIVE DIRECTOR

P.O. BOX 13087
CAPITOL STATION
AUSTIN, TEXAS 78711

AREA CODE 512
475 3187
1700 NORTH CONGRESS AVENUE

RECEIVED
JAN 7 1977
Budget/Planning

December 31, 1976

IN REPLY REFER TO
TWDBP

Mr. Charles D. Travis, Director
Governor's Budget and Planning
Division
Office of the Governor
Executive Office Building
Austin, Texas 78701

Attention: Mr. H. Anthony Breard

Dear Mr. Travis:

Re: Draft Environmental Impact Statement for the Crude Oil Transportation System from Valdez, Alaska, to Midland, Texas (as Proposed by SOHIO Transportation Company).

Standard Oil Company of Ohio has proposed a transportation system for delivery of Alaskan crude oil from the Texas-Alaska pipeline terminal at Valdez, Alaska, to Midland, Texas, where the oil can be distributed to refineries to the north and east. A tanker fleet will transport the crude oil from Valdez to Long Beach, California. The crude oil will be transported via pipeline from Long Beach to Midland. Only 245 miles of new pipeline will be required to traverse the 1,027 mile route. About 788 miles of existing natural gas pipeline will be converted for transporting the crude oil.

An existing natural gas pipeline from El Paso to Jal, New Mexico, will be converted to transport crude oil. All segments are to be pressure tested to insure against leaks which could pollute adjacent groundwater. This existing line's cathodic protection system will be supplemented as required to mitigate corrosion.

The above-cited Draft Environmental Impact Statement has been reviewed at staff level. No conflict is foreseen between the proposed measures and any planned or potential future development of Texas water resources.

Sincerely,

James M. Rose

General Land Office

AUSTIN, TEXAS 78701
BOB ARMSTRONG, COMMISSIONER

PLANNING PROGRAM
1700 North Congress
Austin, Texas 78701

(512) 475-6902

January 3, 1977

Mr. H. Anthony Breard, Coordinator
Natural Resources Section
Budget and Planning Office
Office of the Governor
411 West 13th Street
Austin, Texas 78701

RE: Draft EIS for the Crude Oil Transportation System from Valdez, Alaska, to Midland, Texas (Sohio Pipeline Project)

Dear Mr. Breard:

This office has completed its review of the draft EIS on the Sohio Pipeline Project. The seven-volume document appears to adequately evaluate all the possible impacts on lands managed by the General Land Office. We are satisfied that the Texas portion of the pipeline will be managed in a manner that will not cause any significant negative impacts on these lands. However, we would like to request that the proper right-of-way easements be obtained for all State-owned tracts traversed by the pipeline.

We appreciate your coordinating this review with the General Land Office.

Sincerely,

Bob Armstrong

Bob Armstrong
Commissioner

TEXAS PARKS AND WILDLIFE DEPARTMENT

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CLAYTON T. GARRISON
EXECUTIVE DIRECTOR

4200 South School Road
Austin, Texas 78744

January 11, 1977

Mr. H. Anthony Breard, Coordinator
Natural Resources Section
Governor's Budget & Planning Office
411 West 13th Street
Austin, Texas 78701

RECEIVED
JAN 10 1977
Budget/Planning

Dear Mr. Breard:

The Texas Parks and Wildlife Department has reviewed the Draft Environmental Impact Statement: Crude Oil Transportation System from Valdez, Alaska to Midland, Texas (as proposed by Sohio Transportation Company). We are pleased to learn that Sohio proposes
2 to minimize visual impacts on Hueco Tanks State Historical Park. This Department would prefer that the proposed El Paso pump station (pages 3-282, 3-299, 3-300 and 4-46) be placed outside of the foreground visibility zone for this park if at all possible.

3 Sohio and the Bureau of Land Management should be alerted to the possibility of encountering prairie dog towns on the proposed pipeline alignment in Texas. Destruction or damage to such towns could indirectly effect the black-footed ferret which is listed as rare and endangered by both the Department of Interior and the State of Texas.

4 The Franklin Mountains Wilderness Area (page 2-284, Attachment 1, page 83) is owned by the City of El Paso rather than being a State park as portrayed.

Thank you for allowing us to review this document.

Sincerely,

CLAYTON T. GARRISON
Executive Director

CTG:MW:bp

Texas Historical Commission
Box 12276, Capitol Station
Austin, Texas 78711
Truett Latimer
Executive Director

January 11, 1977

RECEIVED
JAN 12 1977
Budget/Planning

Mr. Charles D. Travis, Director
Budget and Planning Office
Office of the Governor
(Attn: State Clearing House)
411 West 13th Street
Austin, Texas 78701

Re: Draft Environmental Impact Statement
Crude Oil Transportation System: Valdez, Alaska to Midland, Texas
(As Proposed by SOHIO Transportation Company)

Dear Mr. Travis:

In response to your request concerning the above-referenced proposal, we have examined the D.E.I.S. and our Master File and offer the following comments:

1) The area generally affected by the implementation of the proposed facility has not been the subject of an archeological survey to determine the location, condition and significance of cultural resources which lie within the proposed transportation system. Therefore, a survey of the transportation system corridor by an appropriately trained specialist to
5 provide data concerning cultural resources which might qualify for inclusion within the National Register of Historic Places is warranted. The State Historic Preservation Officer stands ready to comment on the proposed project's effects upon potentially eligible sites soon after receipt of the evaluation (survey), pursuant to compliance with the Advisory Council on Historic Preservation Procedures (36 C.F.R., Part 800).

2) The proposed transportation system will affect Hueco Tanks, an archeological site well known for aboriginal art and listed in the National Register of Historic Places. The placement
6 of the El Paso Power Station within close proximity to Hueco Tanks is generally unacceptable because of the introduction of long term visual and possible audible intrusions. Mitigation to ameliorate these and other effects will be required to avoid an adverse effect upon this National Register site.

Page 2
Letter to Mr. Charles D. Travis

3) The placement of power transmission lines as close as now recommended to the Guadalupe Mountains National Park and
7 certain key facilities within the park is injurious to the unique nature and setting of the park and would affect the interpretation of the park to both the casual and long-duration visitors by introducing visual discontinuities which are not in keeping with the concept of wilderness areas, etc. Mitigation of effects should reduce the impact of the needed power lines.

Thank you for the opportunity to comment on this undertaking. If we may be of further service, please advise.

Sincerely,

Truett Latimer
State Historic Preservation Officer

By

Alton K. Briggs
Archaeologist
Cultural Resource Management

AKB:la

COMMISSION
REAGAN HOUSTON, CHAIRMAN
DEWITT C. GREER
CHARLES E. SIMONS

STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION
AUSTIN, TEXAS 78701

ENGINEER-DIRECTOR
B. L. DEBERRY

December 15, 1976

RECEIVED
DEC 16 1976
Budget/Planning

IN REPLY REFER TO FILE NO. D-8E 454

Draft Environmental Impact Statement
Crude Oil Transportation System From
Valdez, Alaska to Midland, Texas

Mr. H. Anthony Breard
Coordinator, Natural Resources Section
Budget and Planning Office
Office of the Governor
Executive Office Building
411 West 13th Street
Austin, Texas 78701

Dear Sir:

Reference is made to your memorandum dated December 2, 1976 transmitting the draft environmental impact statement covering the Crude Oil Transportation System from Valdez, Alaska to Midland, Texas as proposed by SOHIO Transportation Company.

Any reconstruction or relocation of the pipeline should not interfere with traffic on the State highway system. Any work required on highway right of way must be approved by the Department. Applications for permit should be submitted to the appropriate SDHPT District Offices. A map showing District boundaries is attached and the names and addresses of the District Engineers for Districts 24 and 6 are as follows:

Mr. Joe M. Battle P.O. Box 10278 El Paso, Texas 79994	Mr. August Pearson P.O. Box 474 Odessa, Texas 79760

Other work that could affect the operation of the State highway system as a result of erosion or diverted drainage should be reviewed by the Department's headquarters office.

The Department extends its cooperation in the development of this project.

Sincerely yours,

B. L. DeBerry
Engineer-Director

By R. L. Lewis

R. L. Lewis, Chief Engineer
of Highway Design

Attachment

TEXAS AIR CONTROL BOARD

PHONE 512/451-5711
6520 SHOAL CREEK BOULEVARD
AUSTIN, TEXAS - 78750

CHARLES R. BAROEN, P. E.
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WILLIE L. ULICH, Ph.D., P.E.

January 4, 1977

JAN
Budget

Mr. Anthony Breard, Coordinator
Natural Resources Section
Budget and Planning Office
Office of the Governor
Executive Office Building
411 West 13th Street
Austin, Texas 78701

Re: Draft Environmental Impact Statement for the Crude Oil Transportation System from Valdez, Alaska, to Midland, Texas (as proposed by SOHIO Transportation Company)

Dear Mr. Breard:

We have reviewed the above cited document and have the following comments:

Construction

The report adequately describes the short-term impacts on air quality of the project during the construction phase. Most of the description relates to emissions and not ambient air concentrations. However, this treatment is adequate because the magnitude of the potential adverse air quality effects due to construction should be minor. Although there will probably be some temporary, localized effects due to dust and machinery exhaust, we believe that the construction phase will not significantly affect overall ambient air quality.

Operation

The document estimates that 335 tons of total hydrocarbons will be emitted each year. Our calculations indicate that 960 tons/year will be emitted from the floating roof tanks. This
8 represents 10% of the total inventoried emissions of hydrocarbons in Midland County and 4% of the emissions in adjoining Ector County. Recently, double seal floating roof tanks, which are a technology for reducing evaporative losses from petroleum storage, have become available. Emissions from double seal floating roof tanks are in the range of 10% to 20% of the emissions for conventional floating roof tanks. This new

Mr. Anthony Breard
Page 2
January 4, 1977

8 technology would reduce emissions from the proposed tank battery to approximately 100 to 200 tons a year. This rate represents 1% to 2% of Midland County's inventoried hydrocarbon emissions, 0.3% to 0.6% of the emissions from Midland County plus Ector County.

9 The tanks will require a permit from the Texas Air Control Board. As noted in the document, the Midland-Odessa area exceeds the national ambient air quality standards for photochemical oxidants. The percentage impact of the proposed facility is small, and it is the policy of the Texas Air Control Board to grant permits to hydrocarbon sources in such areas as long as best available control technology is used. Double seal construction has recently been defined as best available control technology for tanks storing volatile carbon compounds. However, in light of EPA's recently announced tradeoff (emission offsets) policy, there is a question whether EPA will sanction construction of the project as proposed even if best available control technology is used.

To be complete, the document should discuss the environmental impact of possible secondary development (resulting from the increased supply of crude oil) in the Midland area or elsewhere. This document states that project planning is not finalized and many details are not specified. As stated in the document, changes are possible before construction begins. The impacts described relate to the specific project proposal where they are known. We find the preliminary project plans consistent with our State Implementation Plan; however, we cannot make a final determination on consistency until we review the final completed plan.

Thank you for the review opportunity. If we can assist further, please contact me.

Sincerely yours,

Roger R. Wallis

Roger R. Wallis, Deputy Director
Standards and Regulations Program

cc: Mr. Greg Short, Regional Supervisor, Odessa
Mr. Sabino Gomez, Regional Supervisor, El Paso

Texas Water Quality Board

1700 North Congress
Stephen F. Austin Building
Box 13246 Capitol Station
Austin, Texas 78711

RECEIVED
JAN 3 1977
Budget/Planning

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Frank H. Lewis, VICE CHAIRMAN
M. F. Frost
Frank L. Dill, MD
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Ben Harney
James M. Rose
Hugh C. Yantis, Jr.
EXECUTIVE DIRECTOR

December 16, 1976

Re: Draft Environmental Impact Statement for Crude Oil Transportation System: Valdez, Alaska to Midland

Mr. Charles D. Travis, Director
Governor's Division of Planning and Budget
411 West 13th Street
Austin, Texas 78701

Dear Mr. Travis:

The staff of the Texas Water Quality Board has reviewed the proposed draft environmental impact statement concerning the crude oil transportation system proposed by Standard Oil Company of Ohio for the transportation of Prudhoe Bay crude oil from Valdez, Alaska to Midland, Texas and find that the environmental statement has covered quite adequately the water quality matters resulting from the action.

As was indicated in our letter of September 21, 1976, the Texas Water Quality Board is not a permitting agency for the pipeline construction activities identified in the reports, but as the pollution control agency of the State would specify to such agencies that pollution control measures be employed in the disposal of oil and grease and such other harmful wastes to be disposed of during construction and also that appropriate measures be employed to minimize soil erosion during the construction operations.

As was also indicated in our letter of September 21, 1976, the Texas Water Quality Board would have some jurisdictional responsibility regarding hydrostatic tests water and in the oil spill contingency plan. The test water would require a waste discharge permit from this agency in order to be discharged into a State watercourse, and the oil spill contingency plan would need to be

. Charles D. Travis
December 16, 1976
Page Two

in accord with the State of Texas Oil and Hazardous Substances Pollution Contingency Plan of April, 1976, as developed by this agency.

We appreciate the opportunity to review this proposed activity. If we can be of further assistance, please let us know.

Sincerely,

Emory G. Long

Emory G. Long, Director
Administrative Operations Division

cc: Mr. Charles R. Tulloss, USDI, Los Alamitos, California

RESPONSE

Comment #1

Section 4.3 was revised to incorporate this suggestion.

Comment #2

The applicant has not committed to a relocation of the El Paso Pump Station out of the foreground visibility zone of Hueco Tanks State Park. Because exclusively private lands are involved at the pump station site, the proposed mitigating measure in Section 4.3 would have to be implemented by El Paso County, the only agency with jurisdiction.

Comment #3

Section 2.1.8.2, under Chihuahuan Desert Biome, has been revised to include this comment.

Comment #4

Reference to the Franklin Mountain Wilderness Park as a state park in Attachment 1 has been corrected on the changes and additions sheet for the attachment.

Comment #5

As discussed in Section 4.2.8, following the completion of cultural resource surveys, the identified resources would be evaluated in terms of the National Register of Historic Places criteria as set forth in 36 CFR 800. Following this evaluation, consultation with each of the affected State Historic Preservation Officers would be initiated. Based on the consultation, mitigation plans would be developed for review by the Advisory Council on Historic Preservation.

Comment #6

The adverse visual impact on Hueco Tanks State Park of the proposed El Paso Pump Station site is described and graphically depicted in Section 3.1.10.3. A proposed mitigation to minimize this impact by relocating the El Paso Pump Station 1 mile farther west is contained in Section 4.3. However, implementation of this proposed mitigation will require a commitment from El Paso County, as only private lands are involved.

Comment #7

The adverse impacts of the power-line extension are on the view of the park as seen across the Salt Flats from U.S. 62/180, not on the park itself. This impact is described and depicted in Section 3.1.10.3. The applicant has committed to a relocation of the power line across the Salt Flats south of the highway so as not to interfere with the view; see Section 4.1.10.

Comment #8

The discussion of air quality at Midland has been expanded in Section 3.1.6.3 to reflect the latest available information.

Comment #9

Refer to response to Comment 8 above.

Texas Water Quality Board

1700 North Congress
Stephen F. Austin Building
Box 13246 Capitol Station
Austin, Texas 78711

J. Douglas Toole
CHAIRMAN
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VICE CHAIRMAN
M. F. Frost
Fratis L. Duff, MD
Clayton T. Garrison
Ben Ramsey
James M. Rose
Hugh C. Yantis, Jr.
EXECUTIVE DIRECTOR

December 16, 1976

Re: Draft Environmental Impact Statement for Crude Oil Transportation System: Valdez, Alaska to Midland

Mr. Charles D. Travis, Director
Governor's Division of Planning and Budget
411 West 13th Street
Austin, Texas 78701

Dear Mr. Travis:

The staff of the Texas Water Quality Board has reviewed the proposed draft environmental impact statement concerning the crude oil transportation system proposed by Standard Oil Company of Ohio for the transportation of Prudhoe Bay crude oil from Valdez, Alaska to Midland, Texas and find that the environmental statement has covered quite adequately the water quality matters resulting from the action.

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As was also indicated in our letter of September 21, 1976, the Texas Water Quality Board would have some jurisdictional responsibility regarding hydrostatic tests water and in the oil spill contingency plan. The test water would require a waste discharge permit from this agency in order to be discharged into a State watercourse, and the oil spill contingency plan would need to be

in accord with the State of Texas Oil and Hazardous Substances Pollution Contingency Plan of April, 1976, as developed by this agency.

We appreciate the opportunity to review this proposed activity. If we can be of further assistance, please let us know.

Sincerely,

Emory G. Long

Emory G. Long, Director
Administrative Operations Division

cc: Mr. Charles R. Tulloss, USDI, Los Alamitos, California

REMARKS, HOUSE SPEAKER BILL CLAYTON
Bureau of Land Management Hearing
January 7, 1976
El Paso, Texas

MY NAME IS SUE BARTOW AND I THANK YOU FOR THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY. I WOULD LIKE TO READ THE FOLLOWING STATEMENT FOR SPEAKER OF THE TEXAS HOUSE OF REPRESENTATIVES, BILL CLAYTON.

THE STATE OF TEXAS PRODUCES 40% OF THE NATION'S OIL AND 38% OF ITS NATURAL GAS, MAKING TEXAS ONE OF THE NATION'S LARGEST OIL AND GAS PRODUCERS. TEXAS USES MORE OF THE NATION'S FOSSIL FUEL THAN ANY OTHER STATE, THUS MAKING TEXAS ONE OF THE LARGEST CONSUMING STATES. OVER THE YEARS TEXAS HAS HAD A LONG AND PROFITABLE RELATIONSHIP WITH THE OIL AND GAS INDUSTRY AND CAN CLAIM TO UNDERSTAND THE NEEDS OF BOTH PRODUCING AND CONSUMING STATES.

TEXANS ARE NOW, HOWEVER, PREPARING FOR THE DAY WHEN WE MUST IMPORT ENERGY TO FUEL OUR ECONOMY. IT HAS BEEN PREDICTED THAT IN THE FUTURE TEXAS WILL HAVE A DIFFICULT TIME MEETING ITS OWN NATURAL GAS NEEDS. OUR NATURAL GAS AND OIL RESERVES ARE DECLINING FASTER THAN WE CAN REPLACE THEM. TESTIMONY GIVEN BEFORE THE TEXAS RAILROAD COMMISSION INDICATES TEXAS WILL FACE A 32% SHORTAGE OF ITS ANTICIPATED NATURAL GAS NEEDS.

AS THE STATE'S ENERGY CONSERVATION OFFICE, THE RAILROAD COMMISSION'S RESPONSIBILITY IS TO PREVENT THE WASTE OF OUR NATURAL RESOURCES. AS A RESULT, THEY HAVE ISSUED AN ORDER GRADUALLY PHASING OUT THE USE OF NATURAL GAS AS A BOILER FUEL.

THE STATE OF TEXAS AS WELL AS ALL OTHER ENERGY CONSUMING STATES HAVE LOOKED TO THE ABUNDANT SUPPLY OF ALASKAN OIL AND GAS IN HOPES OF REPLACING LOCAL RESERVES. THE PETROCHEMICAL INDUSTRY IN TEXAS, REPRESENTING 60% OF THE NATION'S PETROCHEMICAL CAPACITY, AND THE REFINERY INDUSTRY,, REPRESENTING 26% OF THE UNITED STATES TOTAL CAPACITY, DEPEND ON ASSURED SUPPLIES OF CRUDE OIL AND NATURAL GAS.

IN THE PAST, THE STATE OF TEXAS HAS DONE ITS PART IN SUPPLYING ENERGY FOR THIS NATION. IN THE FUTURE, TEXAS WILL CONTINUE TO DO ALL THAT IT CAN. FOR THIS REASON, I SUPPORT THE PROPOSED SOHIO CRUDE OIL TRANSPORTATION SYSTEM TO BRING ALASKAN CRUDE OIL TO MIDLAND, TEXAS FOR EQUITABLE DISTRIBUTION IN THE UNITED STATES. IF THIS PROJECT IS APPROVED, THE UNITED STATES WILL HAVE ITS FIRST WEST-TO-EAST CRUDE OIL TRANSPORTATION SYSTEM. THIS DISTRIBUTION SYSTEM COULD ALSO BE USED TO TRANSPORT OIL AND NATURAL GAS FROM THE WESTERN OUTER CONTINENTAL SHELF AND THE NATIONAL PETROLUEM RESERVES IN ELK HILLS, CALIFORNIA TO THE ENERGY-DEFICIENT STATES IN THE MID-WEST AND EAST.

ACCORDING TO STUDIES DONE BY THE FEDERAL ENERGY ADMINISTRATION, THE DEPARTMENT OF INTERIOR AND THE NATIONAL PETROLEUM COUNCIL, THE WEST COAST MAY HAVE A SURPLUS RANGING FROM 300,000 to 600,000 BARRELS PER DAY IN 1978 AND PROBABLY HIGHER IN THE 1980's. THE TERM "SURPLUS" IS MISLEADING BECAUSE MANY STATES ARE ENERGY-DEFICIENT AND HAVE ANXIOUSLY AWAITED THE EQUITABLE DISTRIBUTION OF THIS OIL AND GAS SINCE ITS DISCOVERY.

THIS PROPOSED WEST-TO-EAST TRANSPORTATION SYSTEM COULD PROVE INVALUABLE TO THE AMERICAN PEOPLE. THE COST OF THE ALASKAN CRUDE OIL AND CONSTRUCTION MATERIAL COULD BE HELD AT A MINIMUM SINCE 80% OF THE PROPOSED PIPELINE ALREADY EXISTS.

FROM THE STANDPOINT OF THE AMERICAN CONSUMER, THE SOHIO SYSTEM WOULD BE THE MOST SECURE FROM FUTURE EMBARGOES. IT COULD HELP EASE THE DEPENDENCE ON FOREIGN CRUDE OIL AND THE ASSOCIATED HIGH PRICES AND SUPPLY UNCERTAINTIES.

TEXANS HAVE LONG RECOGNIZED THE VALUE OF THIS NATION'S NATURAL AND ENERGY RESOURCES. THE SCIENCE AND TECHNOLOGY THAT HAVE MADE THE UNITED STATES ONE OF THE WORLD'S LEADING PRODUCERS OF OIL AND GAS CAN ALSO BE USED TO PROTECT THE ENVIRONMENT. THE PROPOSED SYSTEM WOULD RECYCLE AN ABANDONED NATURAL GAS LINE, AND THEREFORE HAS RECEIVED THE SUPPORT OF MANY ENVIRONMENTALISTS.

TEXAS STATE AGENCIES INVOLVED IN REVIEWING THE DRAFT ENVIRONMENTAL STATEMENT HAVE FOUND THAT IT HAS QUITE ADEQUATELY COVERED ENVIRONMENTAL QUALITY MATTERS RESULTING FROM THE PROPOSED ACTION. TEXAS STATE AGENCIES WILL CONTINUE TO PLAY A MAJOR ROLE TO ASSURE THAT OUR ENVIRONMENT IS PROTECTED WITH THE LATEST TECHNOLOGY.

WITH OVER 400 FEDERAL, STATE AND LOCAL AGENCIES INVOLVED IN THE PERMITTING PROCESS, I WOULD URGE THAT ALL DECISIONS BE MADE AS QUICKLY AS THE GATHERING OF THE OBJECTIVE DATA WILL PERMIT. EL PASO NATURAL GAS COMPANY HAS ASSURED ITS CUSTOMERS IN TEXAS, NEW MEXICO, ARIZONA AND CALIFORNIA THAT ABANDONMENT WILL RESULT IN NO LOSS OF SERVICE AND THAT THE CUSTOMERS WILL RECEIVE ALL BENEFITS RESULTING FROM ABANDONMENT.

STATE AND FEDERAL ACTION TO IMPEDE THE TRANSPORTATION OF ALASKAN CRUDE OIL TO THE ENERGY-DEFICIENT STATES ARE ACTUALLY ANTI-CONSUMER ACTIONS. AS A PUBLIC OFFICIAL IN AN ENERGY PRODUCING AND CONSUMING STATE, I AM CONCERNED ABOUT SOME STATE'S UNDERSTANDING OF OUR ENERGY CRISIS AND THEIR ACTIONS TO ALLEVIATE THE SITUATION. WHILE MOST PEOPLE IN THIS COUNTRY WILL TELL YOU WE HAVE AN ENERGY CRISIS, FEDERAL AND STATE BUREAUCRACIES CONTINUE TO DELAY PROJECTS THAT ARE IN THE NATIONAL INTEREST. IT SHOULD BE REMEMBERED THAT NO BUREAUCRAT IN WASHINGTON, OR IN CALIFORNIA OR IN TEXAS HAS MORE WISDOM THAN THE COLLECTIVE JUDGMENT OF THE AMERICAN PEOPLE.

IF THE PROPOSED CRUDE OIL TRANSPORTATION SYSTEM IS FURTHER DELAYED, I WOULD URGE THAT THE PEOPLE PETITION CONGRESS AND THE PRESIDENT TO TAKE THE NECESSARY ACTION GRANTED THEM UNDER PUBLIC LAW 93-153 TO ASSURE THE AMERICAN PEOPLE OF THE BENEFITS OF OUR ALASKAN OIL AND GAS.

THANK YOU.

TESTIMONY FOR GOVERNOR DOLPH BRISCOE

BY ALVIN C. ASKEW

January 5, 1977

PROPOSED CRUDE OIL TRANSPORTATION SYSTEM:
VALDEZ, ALASKA, TO MIDLAND, TEXAS

My name is Alvin Askew. I am Executive Director of the Texas Governor's Energy Advisory Council. I am testifying today on behalf of the Texas Governor, Dolph Briscoe.

I have always been impressed with the American ability to pull together to do what is necessary in times of crisis. However, I am deeply concerned that we as a nation have been unable to act together to alleviate the energy crisis.

Our nation depends on oil and gas to supply over 75% of our energy needs despite the fact that these two fossil fuels together only account for about 7% of our proved energy reserves. The switch to coal and nuclear, and ultimately perhaps fusion and solar energy, will take decades. Meanwhile, we remain dependent on oil and gas to heat our homes, power our cars and fuel our economy. Oil and gas production has peaked in the U.S. and is now declining. Oil production peaked in 1972 and is declining at about 3% per year; gas production peaked in 1973 and is declining at rates in excess of 7% per year.

Texans understand the energy crisis only too well because we have seen first hand the rapid depletion of our non-renewable energy resources. Texas is the largest consumer of energy among the 50 states as well as the largest producer of energy.

It would be the height of folly to reject a common-sense, rational approach to the distribution of Alaskan oil based on the hopes that Texas gas will someday, somehow be available in past quantities.

In 1975 the Texas Railroad Commission issued an order prohibiting new contracts for the use of natural gas as a boiler fuel and mandating a phaseout of boiler fuel gas. Within a period of a few years, Texas gas exports to other states have dwindled from two-thirds of marketed production to about one-third of production.

Texas has long provided the energy needs for the rest of the nation. We will continue our efforts to produce oil and gas as well as coal and uranium. Nevertheless, I think it is safe to say, indeed, it must be said, that we cannot expect a return to the days of plentiful Texas exports.

We are fortunate indeed, for the vast discoveries of Alaskan oil and gas. Before this year is over, we expect to begin receiving crude oil from Prudhoe Bay, and ultimately we hope to receive 2 million barrels of oil per day.

We are here today to examine the merits of a proposed system designed to receive up to 700,000 barrels per day of the Alaskan crude and transport it eastward for eventual delivery to markets in the east and Midwest.

We have a federal law to see that Alaskan oil and gas is equitably shared by all regions of the country. There is approximately 9.6 billion barrels of oil and 26 trillion cubic feet of natural gas in Alaska that is needed to provide fuel to the energy-deficient states and to limit their dependence on costly and unreliable imported oil. We have before us today a proposed crude oil transportation system to bring Alaskan crude oil to where it is needed in the Midwest and the East in a manner having minimal environmental impact. What we do need is for all states to be committed to doing all they can to supply energy for America. Anything less would not be in this nation's best interest.

We feel that the proposed SOHIO system is in the best interests of the nation because; one, it can be completed quicker than alternatives; two, it will result in minimal disruption of the environment in that it would utilize an existing pipeline for 80% of its length; and three, it will provide the least expensive and most direct delivery of oil to an existing network of pipelines serving 65% of the refinery capacity in the U.S.

All the evidence seems to indicate that after the proposed abandonment, the mainline transmission of gas through the El Paso Natural Gas Company line will be capable of providing to its customers in Texas, New Mexico, Arizona and California all the gas supplies now known to be available.

Furthermore, the El Paso Company has assured all of its customers that it will pass on to them the direct benefits resulting from their abandonment proposal. Most consumers are not aware that only a fraction of their gas costs are based on the wellhead price of gas. A larger share is based on the cost of transmission and distribution.

When gas is transported through under-utilized lines such as the El Paso line, the consumers must still pay the fixed costs of amortizing the capital expense of the pipeline. As the line carries a diminishing quantity of gas, each unit of gas transported must bear a greater burden of paying the fixed costs resulting in higher unit costs. Thus it is that California consumers stand to benefit from a proposal which would increase the capacity of utilization of the El Paso system.

We are not opposed to the State of California demanding reasonable environmental safeguards. We believe the proposed SOHIO project, together with SOHIO's assurances to trade off with existing emissions, constitutes a reasonable safeguard.

It is our hope that the federal and local authroities involved in the permitting and licensing process will make their decisions based on the long range national interests and common sense.

Thank you for this opportunity to express the views of the Governor of Texas.

BRAD OWEN
TWENTY-FOURTH DISTRICT
918 ELINOR STREET
SHELTON, WASHINGTON 98584
RESIDENCE TEL. 426-3103
LEGISLATIVE TEL. 753-7984

NINETY-FIFTH LEGISLATURE
1977-78

House of Representatives
STATE OF WASHINGTON
OLYMPIA

January 17, 1977

Bureau of Land Management
P. O. Box 660,
Los Alamitos, California 90720

Dear Gentlemen,

it has been brought to my attention that you will be reviewing the alternatives for oil deliveries and pipelines throughout the country.

It is my desire to express to you my feelings and what I believe to be the majority feeling of my constituency on the proposed Northern Tier Pipeline and Oil Port.

I do not feel the area around Port Angeles is at all compatable with the Oil Port proposal. Within the area we have extensive commercial fishing and recreation areas. The Olympic Peninsula is probably the heavieat used recreation area in the State.

in a recent ballot the residence of the area voted two to one against the proposal.

I would ask that you review the atudy and findings of the No Oil Port Committee and give it serious consideration.

Thank you for giving me the opportunity to express my feelings on this matter. Your assistance in supporting the strong wishes of the people within the 24th Legialstive District and not the Oil Port will be greatly appreciated.

Sincerely,

Brad Owen

Brad Owen
State Representative, 24th District

BSO/ac

9.17.3 Local Governmental Units

Southern California
AIR POLLUTION CONTROL DISTRICT
DISTRICT HEADQUARTERS
9420 TELSTAR AVENUE EL MONTE, CALIFORNIA 91731 · 213 443-3931

January 11, 1977

File No. C61202L

Mr. Charles R. Tulloss
Project Manager
BLM, EIS Project Office
P.O. Box 660
Los Alamitos, CA 90720

Dear Mr. Tulloss:

Draft Environmental Impact Statement Crude Oil Transportation System, Valdez, Alaska to Midland, Texas

We have reviewed the DEIS for subject project and are pleased to offer these comments on the air quality aspects of those portions of the project within our jurisdiction.

Description of the Existing Air Environment

The existing air quality of California areas affected by the project is, in general, accurately and completely described in the DEIS. However, there are a few corrections and additions required in order to update some of the information.

1 The statement on page 2-260 in the last paragraph that, "in general, improvements in air quality have been less than expected", is not quite accurate. Air quality in the South Coast Air Basin (AQCR 24) as measured during the last four years, indicates substantial improvements in overall air quality have taken place since 1969, the year for which much of the data is shown in the DEIS. The Report could indicate improvements but should not discuss such nebulous concepts as "less than expected".

2 Air quality data should be as current as possible and to that end we have enclosed complete summaries of the latest (1975) data from all monitoring stations in the four counties of Los Angeles, Orange, Riverside and San Bernardino which should be included in the Final EIS. The trend line mentioned in paragraph three of page 2-260 as being derived from Figure 2.1.6.2-2 should actually be shown in the figure.

3 The state standard for sulfur dioxide of 4 pphm referred to in paragraph four of page 2-269 as being an annual average is actually a 24 hour average therefore long term averages should not be compared with this standard.

4 The word "offshore" which is used in pages 2-259 and 2-281 to indicate a wind direction from seaward to inland should be changed to read "onshore".

Air Quality Impacts

5 A number of discrepancies were noted in the list of expected air quality impacts contained in Section 3.1.6. A major discrepancy is the omission of carbon monoxide as a primary pollutant in Table 3.1.6-2. Also, worker's vehicles are not listed as a source in this Table and seem not to have been considered elsewhere in the DEIS.

6 In Table 3.1.6-1 oil refinery pollutants are listed as having only an insignificant impact on Los Angeles Air Shed air quality. This would be true only if there is no additional refinery throughput resulting from the incoming Alaskan crude.

7 Total emissions from project operations in the Los Angeles Air Shed should be presented in a consolidated table showing all sources and amounts of pollutants. These emissions should then be compared to pre-project emissions in the various source receptor areas of the Air Shed. We are enclosing copies of emission inventories for source receptor areas in Los Angeles County.

8 The statement in paragraph two of page 3-115 that hydrocarbon emissions would be too small to have any significant effect on meeting air quality standards is not true. New Source Review limits are exceeded for all pollutants shown in Table 3.1.6.1. 1-1 for construction phase emissions alone and of course emissions from project operations will exceed those limits.

9 Table 3.1.6.1. 2-2 showing calculated emissions from the tanker's stacks during pumping operations does not list emissions of sulfur dioxide from the fuel oil burned in the ship's boilers.

Mitigating Measures

Of the mitigating measures proposed for the Port of Long Beach and terminal area we agree with the ones as listed below along with suggested modifications: Numbers conform to those in Section 4.2.2 of the DEIS:

10 1. "Monitoring by electronics or an authorized representative of an enforcement agency prior to and during offloading of crude oil". We also recommend that the monitoring be carried out by trained inspectors from this agency who shall completely monitor each tanker offloading operation from ship's entering port to its departure.

11 2. Requirement for all ships using Pier J to burn 0.5 per cent or less sulfur content bunker fuel while in port.

12 4. "Only tankers having a minimum of 20 per cent segregated ballast will be permitted to utilize the proposed berthing facilities". We recommend that this measure be made more stringent by permitting only ships having completely separate ballasting to use the facilities.

13 6. "An air pollution monitoring station will be established in the port area.....".

14 One mitigating measure not included in the DEIS list should be added. Inert gas systems should be required on all tankers using the proposed berthing facilities. Although SOHIO intends to use only inert gas equipped tankers the port facilities would be common carrier berths so that other tankers without inert gas systems could use it. This should be precluded.

Irretrievable Commitment of Resources

15 The availability of natural gas is important to this critical air basin if maximum improvements in its air quality are to be realized. We recommend that the question of future alternative uses of the El Paso pipeline be fully discussed before it has been irretrievably committed to crude oil transport.

The DEIS states that if the Gas Arctic pipeline project to carry Alaskan gas to the "lower 48" is approved without a branch to the west coast and the existing El Paso gas line from Texas to Southern California is taken out of service to carry oil there probably will be a shortage of gas pipeline capacity from Texas to California starting in 1981 and becoming severe by 1983.

If you have any questions regarding these comments please call me at (213) 443-3931, Ext.238 or Thomas Mullins at Ext. 241.

Very truly yours,

J. A. Stuart
Chief Air Pollution Control Officer

Alan K. Stazer

Alan K. Stazer
Senior Air Pollution Analyst
Head, Impact Analysis Section

TPM:jc

Enc.

RESPONSE

Comment #1

The phrase "less than expected" has been replaced with "slower than expected when Congress passed the Clean Air Act of 1970."

Comment #2

Much of the enclosed data has been incorporated in Section 2.1.6 of the FES. The trend line has been inserted in Figure 2.1.6.2-2.

Comment #3

The reference to California has been deleted.

Comment #4

Section 2.1.6.2, Emissions Distribution, has been corrected in the FES.

Comment #5

Carbon monoxide is included in Appendix A3.1.6.1. Emissions from workers' vehicles are included in the analysis of carbon monoxide in Section 3.1.6.1.1, under Carbon Monoxide.

Comment #6

Additional refining is determined by growth and market conditions, not by size of the surplus or by pipeline throughput capabilities.

Comment #7

Estimated emissions from all sources are summarized in Appendix A3.1.6.1 to give a perspective on the requirements for trade-offs. The larger emissions are given as percentages of total emissions in Section 3.1.6.

Comment #8

New source rules do not apply to construction. If the emissions were long-lived they could ultimately have an effect on meeting the hydrocarbon standard. The sentence was revised to remove ambiguity.

Comment #9

Tanker SO_2 emissions are discussed in Section 3.1.6.1.2, under Sulfur Dioxide.

Comment #10

This mitigating measure in Section 4.2.2 has been revised to reflect this comment.

Comment #11

This committed measure has been added in Section 4.1.1 of the FES.

Comment #12

This mitigating measure in Section 4.2.2 has been changed to reflect this comment.

Comment #13

No change required.

Comment #14

This suggested mitigating measure has been added to Section 4.2.2.

Comment #15

All known reasonable and significant alternative uses of the pipeline are analyzed in Section 3.1.16.5 of the FES and the report entitled "Energy Supply/Demand." This report is available as referenced in the Table of Contents of Chapter 1. Conversion to crude oil use is not an irreversible commitment.

COMPREHENSIVE PLANNING ORGANIZATION OF THE SAN DIEGO REGION

December 16, 1976

SUITE 524
SECURITY PACIFIC PLAZA
1200 THIRD AVENUE
SAN DIEGO, CALIFORNIA 92101
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Action by 3
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Notes

Mr. Ed Hartley
State Director
Bureau of Land Management
2800 Cottage Way
Sacramento, CA 95825

Subject: Draft EIS and EIR: Sohio West Coast to Mid-Continent Pipeline Project

Dear Mr. Hartley:

On December 10, 1976, the Executive Committee reviewed the subject Draft EIS and the Draft EIR prepared by the California Public Utilities Commission in accordance with the National Environmental Policy Act and the California Environmental Quality Act.

Based on CPO investigation of the proposed Oil Transportation System, the Executive Committee has determined that further review and comment by CPO is unnecessary. The Executive Committee does recommend that:

1 The final environmental documents should consider the impact of a coherent national energy policy for long range development, distribution and conservation of energy resources which could help avoid short term national shortages or surpluses and assist in determining the appropriate distribution strategy for the presently imminent West Coast oil surplus.

If you have any further questions, please do not hesitate to call Mr. Stev Sachs.

Sincerely,

RICHARD J. HUFF
Secretary

RJH/SS/ce

NI-77-116

cc: Frederick E. John
William G. Kirkham

MEMBER AGENCIES: Cities of Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Escondido, Imperial Beach, La Mesa, National City, Oceanside, San Diego, San Marcos, Vista, and County of San Diego / EX-OFFICIO MEMBER: California Department of Transportation / HONORARY MEMBER: Tijuana, B. C.R.A.

COMPREHENSIVE PLANNING ORGANIZATION OF THE SAN DIEGO REGION

Project Notification

Item No.: NI-FY77-99 through NI-FY77-140

Date 12/10/76

TO: Executive Committee

FROM: Executive Director

SUBJECT: Project Notifications Submitted to Areawide Clearinghouse November 1976

ITEM #		STAFF RECOMMENDAT
G. NI-116	Draft EIR, EIS: Sohio West Coast to Mid-Continent Pipeline Project/Port of Long Beach and Federal Bureau of Land Management	COMMENT

Reviewed pursuant to California Environmental Quality Act and National Environmental Policy Act

The Standard Oil Company of Ohio is proposing to ship crude oil from Valdez, Alaska to Long Beach, California by tanker and then transport the oil to Midlands, Texas by pipeline for distribution to the midwest. The project involves the construction of a tanker port and oil storage tanks at Long Beach, the construction of 235 miles of new pipelines, and the conversion of 790 miles of existing pipeline from gas to oil transport. Initially, 700,000 barrels of crude oil per day would be landed in Long Beach.

The State Air Resources Board has projected a maximum air pollution load of 93 tons per day of hydrocarbon emissions in the South Coast Air Basin resulting from the project as presently proposed. Oil company projections using different assumptions as to method of oil transfer have resulted in hydrocarbon emissions as low as 1.5 tons per day. The emissions result mainly from tanker transfer, purging and ballasting operations and could have an adverse air quality impact on the San Diego air basin.

Comment

The final environmental documents should consider the impact of a coherent national energy policy for long range development, distribution and conservation of energy resources which could help avoid short term national shortages or surpluses and assist

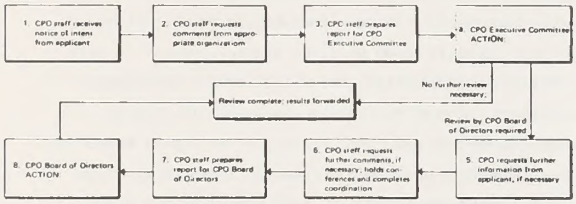
AREAWIDE CLEARINGHOUSE REVIEW

Objectives

The Areawide Clearinghouse Review process in San Diego is a regionwide intergovernmental cooperation mechanism designed to improve federal and state activities in a manner consistent with local government needs. It provides a quick and efficient service to federal, state and local governments by maximizing direct intergovernmental contacts before major federal and state planning, funding, development and regulatory decisions are completed.

The process works best at the outset of federal and state planning and decision-making affecting the San Diego Region. Often its most useful product is the strengthening of local applications for federal funds prior to the point when they are submitted to the federal government, thereby improving the chances for funding approval. The process also has the capability of revealing untimely, inconsistent, or duplicating federal and state activities and is designed in a positive, cooperative framework that supports the needs of local governments.

Process



Criteria

1. The extent to which the project is consistent with or contributes to the fulfillment of comprehensive planning for the region, or any of its localities.
2. The extent to which the proposed project:
   (a) Duplicates, runs counter to, or needs to be coordinated with other projects or activities being carried out in or affecting the area; or
   (b) Might be revised to increase its effectiveness or efficiency.
3. The extent to which the project contributes to the achievement of State, areawide, and local objectives and priorities relating to natural and human resources and economic and community development including:
   (a) Appropriate land uses for housing, commercial, industrial, governmental, institutional, agricultural, and other purposes.
   (b) Wise development and conservation of natural resources, including land, air, water, mineral, wildlife, vegetative and others;
   (c) Balanced transportation systems, including highway, air, water, pedestrian, mass transit, and other modes for the movement of people and goods;
   (d) Adequate outdoor recreation and open space;
   (e) Protection of areas of unique natural beauty, historical and scientific interest;
   (f) Properly planned community facilities, including utilities for the supply of power, water, and communications, for
4. The extent to which the project significantly affects the environment including the consideration of:
   (a) the environmental impact of the proposed project;
   (b) Any adverse environmental effects which cannot be avoided should the proposed project be implemented;
   (c) Mitigation measures proposed to minimize the impact;
   (d) Alternatives to the proposed project;
   (e) The relationship between local short term uses of men's environment and the maintenance and enhancement of long term productivity;
   (f) Any irreversible and irretrievable commitments of resources which would be involved in the proposed project or action, should it be implemented; and
   (g) The growth, inducing impact of the project.
5. The extent to which the project contributes to more balanced patterns of settlement and delivery of services to all sectors of the area population, including minority groups.
6. Effects on energy resource supply and demand.
7. The extent to which people or businesses will be displaced and the availability of relocation resources.
8. In the case of a project located in the coastal zone, the relationship of the project to the approved State program for the management of the coastal zone and its consistency therewith.
9. In the case of a project for which assistance is being sought by a special purpose unit of government, whether the unit of general local government having jurisdiction over the area in

RESPONSE

Comment #1

The project application is for a crude oil distribution system from Valdez, Alaska, to Midland, Texas. It is not within the scope of this project to determine national energy policy.

BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES
822 HALL OF ADMINISTRATION / LOS ANGELES, CALIFORNIA 90012

MEMBERS OF THE BOARD
PETER F. SCHABARUM
KENNETH HAHN
EDMUND D. EDELMAN
JAMES A. HAYES
BAXTER WARD

JAMES A. HAYES
SUPERVISOR, FOURTH DISTRICT
(213) 974-4444

January 5, 1977

Hearing Officer
Bureau of Land Management

Dear Sir:

SOHIO ENVIRONMENTAL IMPACT STATEMENT HEARING,
313 NORTH FIGUEROA, LOS ANGELES, CALIFORNIA

Supervisor James Hayes has asked that his comments relative to the draft EIS on the crude oil transportation system between Long Beach, California and Midland, Texas, be included as part of the record for this hearing.

Unfortunately, Supervisor Hayes has a schedule today which conflicts with your hearing and cannot attend personally. Nevertheless, he is vitally interested and concerned about this project and would like to insure that his comments contained in the attached brief statement be put on record and be reviewed by the Bureau of Land Management.

Thank you for your consideration and assistance in this matter.

Yours truly,

JAMES A. HAYES

Barna S. Szabo
Chief Deputy

JAH:BSS:wh

Attachment

DURING THE PAST SEVERAL YEARS, I HAVE BEEN VERY ACTIVE AND INTERESTED IN THE WHOLE ISSUE OF ENERGY DEVELOPMENT WITH PARTICULAR EMPHASIS ON THE DEVELOPMENT OF ALTERNATE ENERGY SOURCES AND THE ASSURANCE OF CONTINUED ENERGY SUPPLY TO THE CITIZENS OF THIS COUNTY. IN LIGHT OF MY DEEP INTEREST, I FEEL COMPELLED TO GIVE YOU MY COMMENTS ON THE PROPOSED SOHIO WEST COAST TO MID-CONTINENT PIPELINE.

THE PROJECT, AS PROPOSED, WILL USE THE PORT OF LONG BEACH AS THE ENTRY POINT FOR ALASKAN OIL. THAT OIL WILL BE TRANSFERRED FROM THE PORT VIA A PIPELINE THAT WILL PASS THROUGH THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT. THIS USE OF THE FLOOD CONTROL CHANNEL WAS MADE POSSIBLE BY THE BOARD OF SUPERVISORS IN THEIR CAPACITIES AS DIRECTORS OF THE FLOOD CONTROL DISTRICT IN AN ACTION I INITIATED IN 1975.

BY PLACING THE PIPELINE IN THE FLOOD CONTROL CHANNELS, WE WILL BE ABLE TO MINIMIZE THE ENVIRONMENTAL IMPACT CAUSED BY THIS PROJECT.

OTHER STEPS SIMILAR TO THIS ONE CAN BE TAKEN AND MUST BE TAKEN IN THE FUTURE TO INSURE THAT THE CITIZENS OF LOS ANGELES COUNTY ARE PROTECTED FROM THE POINT OF VIEW OF SAFETY AND ENVIRONMENT. WE SHOULD BE CONSTRUCTIVE IN OUR APPROACH BECAUSE OUR COUNTRY NEEDS ADDITIONAL ENERGY AND BECAUSE I AM CONCERNED ABOUT THE

MAINTENANCE OF ENVIRONMENTAL QUALITY IN THE SOUTH COAST AIR BASIN. I WOULD LIKE TO EMPHASIZE THAT OUR APPROACH IN LOS ANGELES COUNTY HAS BEEN A POSITIVE ONE. THAT IS, WE HAVE RECOGNIZED THE NEED TO GO AHEAD WITH THIS PROJECT BUT NOT WITHOUT TAKING APPROPRIATE SAFEGUARDS.

I HAVE READ THE EXECUTIVE SUMMARY OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT AND FOUND IT TO BE A VERY WELL PREPARED DOCUMENT. THAT COMPARISON IS BASED UPON MY REVIEW OF MANY EIS'S IN MY CAPACITY AS A COUNTY SUPERVISOR AND MEMBER OF THE SOUTH COAST REGIONAL COASTAL COMMISSION. I CAREFULLY NOTED THAT THE EIS INDICATES THAT THERE WILL BE IMPACTS AND THAT THOSE IMPACTS MUST BE APPROPRIATELY MITIGATED. AMONG THE IMPACTS NOTED, TWO WERE OF PARTICULAR INTEREST TO ME -- ACCIDENTAL OIL SPILL AND AIR QUALITY.

LAST MONTH, BOTH SIDES OF THE CONTINENT WERE PLAGUED BY DISASTROUS OIL SPILLS. IT IS MY ONLY HOPE THAT AFTER THOROUGH INVESTIGATIONS ARE CONDUCTED, ADDITIONAL SAFETY MEASURES CAN BE TAKEN TO PREVENT SIMILAR OCCURRENCES IN THE FUTURE.

CURRENTLY, WE HAVE JUST FINISHED DEVELOPING AN OIL SPILL CONTINGENCY PLAN FOR LOS ANGELES COUNTY IN ORDER TO COORDINATE

LOCAL RESPONSE AND RESOURCES WITH EXISTING STATE AND FEDERAL PLANS. WE MUST ALL BE 100% PREPARED FOR ANY EMERGENCY.

THE SECOND IMPACT, THAT OF AIR QUALITY, IS A SERIOUS ONE, BUT LET'S LOOK AT THE FACTS. WE KNOW, FOR EXAMPLE, THERE IS JUST SLIGHTLY OVER 5 MILLION POUNDS OF HYDROCARBONS PER DAY INTRODUCED INTO THE SOUTH COAST AIR BASIN. IN SAN PEDRO BAY, IN BOTH THE PORT OF LOS ANGELES AND PORT OF LONG BEACH, PETROLEUM RELATED OPERATIONS SUCH AS TANKER LOADING AND UNLOADING, BUNKERING (ADDING OF SHIP FUEL), STORAGE OF OIL AND OIL PRODUCTS, AND THE PRODUCTION OF OIL AND GAS PRODUCE ABOUT 105 THOUSAND POUNDS OF HYDROCARBONS PER DAY. THAT PORTION OF THE SOHIO PROJECT WITHIN SAN PEDRO BAY WILL PRODUCE AN ADDITIONAL 2,624 POUNDS OF HYDROCARBONS PER DAY. THIS REPRESENTS AN INCREASE OF SLIGHTLY MORE THAN 2.5 PER CENT IN THE SAN PEDRO BAY. SURELY WE HAVE THE TECHNOLOGICAL EXPERTISE TO CONTROL SUCH A SMALL AMOUNT OF EMISSIONS!

LET ME COMMENT FOR JUST A MOMENT ON THE ISSUE OF "PURGING" AS IT RELATES TO THIS PROJECT. THE BLM PROPOSES THAT TANKERS BE PROHIBITED FROM PURGING IN THE PORT OF LONG BEACH FOR ANY REASON OTHER THAN EMERGENCY OR FOR SAFETY. FURTHERMORE, THE STATE AIR RESOURCES BOARD HAS INDICATED THAT PURGING WILL

RESULT IN CONSIDERABLE EMISSIONS IN THE SOUTH COAST AIR BASIN. IN FACT, SOME PURGING DOES OCCUR RIGHT NOW IN SAN PEDRO BAY. I BELIEVE, HOWEVER, THAT IT IS MINIMAL. PURGING IS A PROBLEM, BUT MODERN VESSELS PROPOSED TO BE USED BY SOHIO WILL AND CAN ELIMINATE THE NEED FOR PURGING. GOVERNMENTAL AGENCIES CAN SIMPLY REQUIRE THE USE OF THAT TYPE OF VESSEL FOR THE SOHIO OIL. WHAT IS NECESSARY THEN IS THE DEVELOPMENT OF APPROPRIATE CONDITIONS ATTACHED TO CERTAIN OF THE REQUIRED PERMITS RELATED TO THE PROJECT. IT SEEMS TO ME THAT THERE IS NO NEED TO PRETEND THAT THIS IS AN UNSOLVABLE PROBLEM OR A DANGER TO THIS BASIN IF IT CAN BE CONTROLLED BY APPROPRIATE REGULATION.

THERE ARE, OF COURSE, OTHER IMPORTANT ASPECTS OF THIS PROJECT THAT I COULD DISCUSS, BUT LET ME CONCLUDE WITH ONE FINAL POINT. THE UNITED STATES CANNOT CONTINUE ITS DEPENDENCY ON FOREIGN OIL WITHOUT TAKING ALL APPROPRIATE STEPS TO REDUCE THAT DEGREE OF DEPENDENCY AS SOON AS POSSIBLE. WE MUST STRIVE TO DEVELOP ALTERNATE SOURCES OF ENERGY SUCH AS GEOTHERMAL AND SOLAR. I HAVE BEEN PUSHING FOR THESE NEW SOURCES IN LOS ANGELES COUNTY AND IN THE NATION FOR THE LAST FOUR YEARS. UNFORTUNATELY, SOLAR, GEOTHERMAL, AND OTHER ENERGY SOURCES ALONE CANNOT MEET OUR TOTAL ENERGY NEEDS OF TOMORROW. THEREFORE, WE MUST MAKE EVERY EFFORT TO DEVELOP AN APPROPRIATE SYSTEM TO TRANSMIT

CRUDE OIL TO SUPPLEMENT OUR ENERGY NEEDS.

WORDS CANNOT EXPRESS MY GREAT SADNESS AND SHOCK AT THE HORRENDOUS EXPLOSION IN SAN PEDRO BAY THAT TOOK NINE LIVES AND DESTROYED THE 810-FOOT TANKER -- SANSINENA -- LAST MONTH. SO FAR, NOBODY KNOWS (AND WE MAY NEVER FIND OUT) THE EXACT CAUSE OF THAT FATAL SPARK WHICH IGNITED THE VAPOR CLOUD TRIGGERING THE EXPLOSION. NOR, AS YET, DO WE KNOW HOW THAT VAPOR CLOUD GOT ON DECK IN THE FIRST PLACE.

WHAT I DO KNOW, HOWEVER, IS THAT THIS WAS THE FIRST EXPLOSION OF ITS KIND IN 29 YEARS -- THE LAST ONE OF THE S.S. MARKAY HAVING OCCURRED IN LOS ANGELES HARBOR IN 1947. I RECOGNIZE THAT MANY INDIVIDUALS AND ORGANIZATIONS ARE CONCERNED THAT SHOULD THE SOHIO PROJECT GO AHEAD, CHANCES WILL BE INCREASED FOR ADDITIONAL ACCIDENTS OF SIMILAR MAGNITUDE TO OCCUR. WITH STRICT MONITORING AND SAFEGUARDS, I STILL BELIEVE THAT THE SOHIO PROJECT IS BENEFICIAL FOR THIS COUNTY. IT IS A PROJECT THAT IS IMPORTANT TO THE ENTIRE COUNTY AND CALIFORNIA THAT CAN THUS SERVE AS AN ENERGY WINDOW FOR THE REST OF THE NATION. MY BELIEF IN THAT REGARD IS STRONG, BUT WITH ONE CAVEAT, NAMELY, THAT THE DEVELOPMENT BE DONE WITH EXTREME ENVIRONMENTAL INTEGRITY AND CONCERN FOR STRICT SAFETY PRECAUTIONS. IN THE LONG RUN, THE PROJECT WILL PROVE TO BE AN ASSET TO SOUTHERN CALIFORNIA AND WILL PROVIDE A MUCH NEEDED ENERGY RESOURCE TO THE ENTIRE COUNTRY.

STATEMENT OF SUPERVISOR JAMES A. HAYES OF LOS ANGELES COUNTY ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR A PROPOSED CRUDE OIL TRANSPORTATION SYSTEM BETWEEN LONG BEACH, CALIFORNIA AND MIDLAND, TEXAS (JANUARY 5, 1977)

****

ENVIRONMENTAL IMPROVEMENT AGENCY

County of San Bernardino

PLANNING DEPARTMENT
1111 East Mill Street, Bldg. 1 · San Bernardino, CA 92415 · (714) 383-1417

Kenneth C. Topping
Planning Director

January 24, 1977

Project Manager
Bureau of Land Management
EIS Project Office
P.O. Box 660
Los Alamitos, CA 90720

Dear Sir:

Thank you for the opportunity to review the Draft Environmental Impact Statement for the SOHIO West Coast to Mid-Continent Pipeline Project. We were pleased to receive the D.E.I.S. well in advance of the public hearing, allowing sufficient time for review and comment.

One of the goals of San Bernardino County's Joint Utilities Management Plan (JUMP), which has been adopted as an element of the County's General Plan, is to "maximize the beneficial effects and minimize the adverse effects associated with siting major utilities." To accomplish this goal, the County has adopted the following policies:

1. New pipeline corridors should be consolidated with existing pipeline or electrical transmission corridors except where there are technical or overload constraints or where there are social, aesthetic, significant economic or other overriding concerns.

2. To minimize the construction of new access roads or rights-of-way roads, pipelines must be located adjacent to existing roads wherever possible.

3. Before approving a major pipeline for location within San Bernardino County, the day-to-day operational hazards, as well as disaster impacts, must be thoroughly considered and a disaster plan submitted by the proponents of the facility to the County Emergency Preparedness Officer for review and approval. The Plan must be complete and include measures for dealing with both primary and secondary impacts of any potential disaster.

4. Where pipelines cross known faults, they will be designed with the latest technology to resist damaging earthquake forces.

EARL GOODWIN
County Administrative Officer
ROBERT B. RIGNEY, Administrator
Environmental Improvement Agency

Board of Supervisors
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DANIEL D. MIKESELL, Second District, Vice-Chairman
JAMES L. MAYFIELD, First District
NANCY E. SMITH, Fifth District
ROBERT O. TOWNSEND, Fourth District

Letter to EIS Project Manager, BLM
Re: SOHIO Pipeline Project
January 24, 1977
Page 2

Most of our concerns have been adequately addressed in the Draft E.I.S., however, the following comments reflect San Bernardino County's concerns which we feel were not adequately addressed:

1. We suggest there be more discussion of specific mitigation measures for crossing fault zones, areas of potential liquefaction, groundwater resource areas, surface water resources. San Bernardino County would insist on the most sophisticated failsafe devices to insure a minimum of damage as a result of oil spills. **1**

2. The pipeline will cross the following equestrian and hiking trails in San Bernardino County:

   San Antonio Creek Channel
   Cucamonga Channel
   Jurupa Mountains
   Santa Ana River
   Reche Canyon
   San Timoteo Canyon

   We suggest that during the construction phase and thereafter, there be a provision for keeping the trails open for hiking and equestrian uses. **2**

3. We concur with the proposed mitigation measure of trading off emissions elsewhere in the South Coast Air Basin to prevent the further degradation of the air quality that San Bernardino County shares with Riverside, Orange and Los Angeles Counties. However, we suggest there be more discussion of the proposed exchange procedure in the E.I.S. It sounds like a reasonable idea, but we suspect it may not be a viable approach, and the details of the concept should be expanded. **3**

With the exception of the above comments, we concur with your identification of the possible impacts and the mitigation measures proposed. We find the proposal to be consistent with the intent of San Bernardino County's policies regarding the siting and design criteria for fuel pipelines as mitigated.

Sincerely,

ENVIRONMENTAL IMPROVEMENT AGENCY
PLANNING DEPARTMENT

SWilson

Steve Wilson
Energy Coordinator

SW:tjt

RESPONSES

Comment #1

BLM believes the mitigating measures are adequate.

Comment #2

Section 2.1.12.3, under San Bernardino County, was revised to reflect hiking-equestrian trails crossed.

Comment #3

Discussion of trade-offs has been expanded in Section 4.1.5 of the FES to include the trade-offs proposed by SOHIO and current agency criteria and objectives.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS REGIONAL COOPERATION FOR REGIONAL PROBLEMS

600 SO. COMMONWEALTH AVE. • SUITE 1000 • LOS ANGELES, CA. • 90005 • 213/385-1000

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LYNN WILSON, JR
Mayor
City of Hemiville
FRANCES WOOD
Councilwoman
City of Fullerton

January 12, 1977

Project Manager
Bureau of Land Management
P.O. Box 660
Los Alamitos, California 90720

Dear Sir:

Attached are official agency comments on your Draft Environmental Statement on the SOHIO Transportation Company's proposal for transportation of Alaskan oil to Long Beach and Texas. These were developed through SCAG's A-95 review process. The Environmental Statement was available to local governments, but no responses were received. These comments were adopted by the Association's Executive Committee on January 6, 1977.

In its adoption the Executive Committee took three actions:

One; Directed staff to transmit the attached comments and concerns to the Bureau of Land Management and other interested agencies and organizations as official SCAG comment on the DES.

Two; Approved a work program to futher analyze the SOHIO proposal for its air quality implications and propose mitigation measures. This work will be done as part of the Association's air quality management planning responsibilities under state law and will be complete in three months.

Three; Recommended to the Bureau of Land Management, Federal Power Commission and other appropriate agencies that final decisions on this project be delayed until --

a. The authorized air quality work has been completed and approved by the Executive Committee and,

b. Mitigating measures have been agreed upon by the parties concerned and included in the project for implementation.

We look forward to working with your staff in this effort. If you have any questions or comment, please feel free to contact Brian Farris of my staff at any time.

Sincerely,

Mark Pisano

Mark A. Pisano
Executive Director

MAP:em

ATTACHMENT

Staff Report

DRAFT ENVIRONMENTAL IMPACT STATEMENT -- CRUDE OIL TRANSPORTATION SYSTEM:

VALDEZ, ALASKA TO MIDLAND, TEXAS (AS PROPOSED BY SOHIO TRANSPORTATION COMPANY)

Current Situation

The SOHIO Transportation Company has proposed a West Coast-Mid Continent pipeline project to transport Alaskan crude oil from the Port of Long Beach by pipeline to refineries in Texas. An initial 700,000 barrels of crude oil per day would be landed at Long Beach. About 200,000 barrels per day would be refined locally and 500,000 barrels would be pumped to Texas for subsequent distribution. In California this project would involve the construction of an oil terminal at Long Beach consisting of tanker berths, oil tanks and other facilities. About 130 miles of new oil pipeline would be constructed in California. In addition, the company plans to use about 121 miles of 30" natural gas line between Beaumont and Desert Center, California, converting it from east-to-west natural gas transmission to west-to-east crude oil transmission. Four new pumping stations would be constructed.

Public hearings begin in January, 1977 and the Final Environmental Impact Statement, FEIS, is scheduled for April 1977. A BLM decision is scheduled on May 1, 1977. The Trans-Alaskan Pipeline System, TAPS, line will begin operation in July 1977. It would take about two years to construct.

Regional Issues

Two types of issues are inherent in this project. First are those concerned with the specifics of the Environmental Impact Statement and the project itself. Second are those of the Region's role in broad scale state and national energy policy, including this project and a number of others, the resulting impacts, and broad approaches for mitigating damages to the Southern California environment.

Air quality is the major topic of regional concern on the project. Estimates vary widely, but the project has the potential of very seriously affecting air quality in the air basin where air quality is already poor. Tradeoffs are proposed by SOHIO whereby new emissions would be covered by old sources being removed, about a one-for-one ratio. There are a number of problems inherent in this which are discussed in Appendix I.

The availability of natural gas is vital to the region if any improvements in air quality can be made. This project would take an existing gas line out of service for at least 25 years. There are indications that this line may be needed by 1983 to carry increased flows of natural gas into Southern California. This is discussed in Appendix I. It is apparent that no final decision should be made on this project until the natural gas situation is resolved.

On a broader scale, it seems that a number of energy projects of statewide and national significance are being proposed for Southern California. If these are to be implemented, the region's environmental quality must still be

protected and improved -- especially its air quality. Since Southern California is being asked to take the pollution load of these greater than regional energy developments, it seems reasonable that special action should be taken by the state and federal governments to protect and enhance regional environmental quality. Actions could include such measures as increased allocation of natural gas to the region to combat the adverse air quality affects of oil and gas facilities, or greater Federal assistance in implementing improved transit facilities to reduce emissions from automobiles.

The Association is able under its air quality planning responsibilities to address these questions. It is proposed that special analysis be included within the Air Quality Management Program, AQMP, to begin in January 1977, and that within 2 to 3 months initial specific policy recommendations on the above issues would then be brought to the Executive Committee in time for inclusion with comments on the Final Environmental Impact Statement.

Recommended Executive Committee Action

Staff recommends that the Executive Committee adopt this report and appendices as the Association's official comments on the Draft EIS and transmit them to the Bureau of Land Management and other appropriate agencies. Further it is recommended that the Air Quality Management Plan include evaluation of state and national energy policies and their effects on the region. Program output would be a series of recommendations for Executive Committee Policies on broad scale actions to mitigate the adverse effects of national signficiant energy projects on the SCAG region.

This effort would begin in January 1977 with initial recommendations to be ready in 2 to 3 months.

Finally, it is recommended that the Executive Committee direct the staff to investigate and review future major energy developments within the context of a broadened perspective of mitigating measures for all impacts of the project.

APPENDIX I

COMMENTS SPECIFIC TO THE DEIS

Air Quality Issues

The ship-to-shore transfer for crude oil raises three important air quality issues:

1) How to calculate the volume of air pollutant emissions.

2) How to determine the probable ambient air quality impact of these emissions to air basins where federal and state air pollution standards are already exceeded;

3) Whether, given a level of added emissions, project applicants should be allowed the opportunity to "trade off" air pollution emissions as part of their applications, and how a bona fide "trade off" is established.

While interested parties generally agree on emission calculation assumptions and procedures, they disagree on the appropriate combination of ships and ship operations in ports which should be used to calculate the largest volume of emissions that could occur in any peak hour or day. For example, SOHIO and the Port of Long Beach/California Public Utilities Commission Environmental Impact Report (EIR) both calculate average daily emissions by dividing the total annual expected emissions from all trips by 365. The Air Resources Board, on the other hand, insists that full-berth occupancy (3 ships in port simultaneously) emissions must be assumed for the purposes of granting a permit.

Trade-Off Controversy

The Air Resources Board reasons that its Clean Air Act responsibilties (to insure the maintenance and attainment of federal/state ambient air quality standards) permit applicants to trade off emission volumes at least equal to and probably greater than the worst case emissions from the proposed project. SOHIO, on the other hand, argues that it should only be "charged" for average emissions. SOHIO reasons that it would be unfair to punish new entrants into the marine terminal business who propose to use best available control technologies, while existing operators can cause greater polluting on per unit throughput by using older and less costly oil facilities, because of preestablished "pollution rights' that are not subject to contemporary permit tests.

Under the Clean Air Act, state and local districts are responsible for reviewing the air quality impacts of new and modified sources of pollution, and disapproving them if they interfere with the attainment or maintenance of federal air quality standards. This requirement in EPA's judgment, does not prohibit major new or expanded sources in dirty areas like Los Angeles, provided that: 1) the net effect of the new emissions together with reductions from existing facilities does not exacerbate health related air quality standards; 2) it contributes to reasonable progress in attaining standards. EPA has recently

published a draft "trade off" policy which will allow plants to locate or expand in dirty air areas if they trade existing pollution emissions for new pollution emissions on a better than one-for-one basis.

The SOHIO proposal was developed within the context of an emissions trade-off concept. SOHIO intends to off-set the emissions increases from tanker operations and crude oil vapor losses by removing existing storage tanks in Long Beach and by requiring ships to burn low sulfer fuel oil. This will be done at a rate equal to or slightly greater than the amount of the proposed emissions increases.

If the SOHIO proposal establishes a precedent for the rate of emissions trade-off (one-for or slightly greater than one-for-one) it will have a continuing long term impact on the rate at which the region's schedule for compliance with federal air quality goals is set. Secondly, if the emissions trade off concept is established it will affect the types of facilities constructed in the region, and the rate at which they will be built. Third, under the emissions trade-off concept proposed new facilities will have a substantial incentive to develop in the near term. With the total emissions in the basin decreasing in the long term it will become increasingly difficult to find emissions to trade-off and increasing more costly. Finally, and perhaps of greatest significance, future projects which may provide more employment might be commercially prohibited from the region due to the paucity of emissions to trade-off and the total economic cost of doing so.

Purging and Ballasting

Two potential air pollution sources are purging and ballasting operations.

Purging is a safety measure to prevent explosion by replacing hydrocarbon vapors in the cargo holds with the ship's inhert exhaust gases, with the purge vent left open to reduce pressure. In the recent ship explosion in Los Angeles Harbor the holds had not been purged or otherwise made safe. SOHIO intends to use an inherting system whereby inhert exhaust gases are pumped into the holds under pressure until the mixture becomes non-explosive and no vapors will be allowed to escape. Any venting necessary would not be done until the ships are outside the air basin, except in emergencies.

Since the proposed facilities would be common carrier berths, other tankers without the inherting system could use it. This raises the possibility that they may purge their tanks.

Staff proposes that the SOHIO tankers be monitored in an appropriate manner to ensure that purging is not done where the vapors could reach the South Coast Air Basin. It is further proposed that the use of the berths be restricted to only those ships which have inherting systems.

Ballast is water taken on by tankers after they discharge their cargo to assure safe operation. Many ships have ballast tanks segregated from the oil tanks. Others take water directly into the cargo holds or have only partially segregated systems. These ships can cause air pollution when the hydrocarbon vapors are displaced by water.

SOHIO's ships will have completely segregated ballast, but the common carrier status of the berths may allow others which do not. Staff recommends that use of the new berths be restricted to those with completely separate cargo and ballast tanks.

Foreclosure of Options in the Existing Gas Transmission Line

There will be no shortage of natural gas pipeline capacity if this project is implemented, with the exception of one alternative.

The DEIS states that in the event that the Gas Arctic pipeline project to carry Alaskan natural gas to the "lower 48" is approved without the legs to the West Coast, and the existing El Paso natural gas line from Texas to Southern California is taken out of service to carry oil, there probably will be a shortage of gas pipeline capacity from Texas to California beginning about 1981, and becoming severe by 1983. This pipeline capacity shortfall would result from the availability of Alaskan gas supplies and the Algerian LNG committed to move west from Texas in 1983. This finding conflicts with those of the proponent and State Energy Commission.

1 The staff of the Federal Power Commission has recommended this alternative to the Federal Power Commission. The Commission must make a recommendation to the President by May 1, and the President to Congress by September 1.

The issue here is that energy projects are part of complex systems, and that action on one has effects on the others. In this case, the options on Alaskan gas and oil must be considered together to avoid possible conflicts at a later time. Staff suggests that the decisions on Alaskan oil and gas transportation be made together to eliminate potential system conflicts, rather then the apparent piecemeal approach now under way. Staff further suggests that the difference in opinion on pipeline capacity and use be resolved.

Areas of Regional Significance and Concern

SCAG's regional Conservation and Open Space Plan is in the final stages of preparation. The plan includes a designation of Areas of Regional Significance and Concern which are of special interest to SCAG in its planning and review work. New pipeline construction would affect several of these areas including San Pedro Bay, the Los Angeles River, Rio Hondo, the San Gabriel River, the Colorado River, and especially the Chino Hills. Construction of the pipeline across the northern portion of the Chino Hills would have serious aesthetic
2 impacts on this area of interest. SCAG is involved in an open space and recreation planning effort in the Chino Hills and resists further scarring by inappropriate facilities. Perhaps the pipeline routing could be modified to avoid the area. If not, then special attention must be given to revegetation and maintenance of the right-of-way.

APPENDIX 2

FUTURE ENERGY DEVELOPMENTS IN THE REGION-BROAD SCALE ISSUES

The SOHIO proposal to land Alaskan crude oil at Long Beach is but one of several major energy-related projects already under way or planned in Southern California. Beyond these proposals for energy facilities within Southern California there are other energy developments, pending or projected, which will have significant impacts on the SCAG region. Related to these large programs and to the general growth of energy consumption are many other projects at a smaller scale which in total will have significant effects on this area, the State, and possibly the nation.

These developments emphasize the need for policy development at the regional level relative to the use of energy as well as the production, transmission, and development of energy resources and systems. Projects already visible include oil and gas production and processing (onshore and offshore), shipment and pipeline transmission of oil and gas, very high voltage electric transmission lines, and various types of electric generating plants. The regional energy consumption increasingly is dependent on sources in other states, neighboring and distant, as well as foreign sources.

More than a dozen major programs and projects are pending which provide a context for considering the SOHIO proposal from an energy perspective:

- o Outer Continental Shelf leasing program which could yield 600,000 barrels per day
- o LNG importation proposals
  - Cook Inlet, Alaska to Oxnard
  - Point Gravina, Alaska to Los Angeles, Oxnard, and Point Conception
  - Indonesian Gas to Oxnard
- o Geothermal energy developments, including
  - Brawley, Heber (Imperial County)
  - Salton Sea area (Riverside County)
  - Randsburg (San Bernardino County)

- o Coal-fired power plants in Utah and Nevada
  - Allen - Warner Valley
  - Intermountain
  - Kaiparowits (postponed?)
- o Nuclear power plants
  - San Joaquin Valley (Kern County)
  - Sundesert (Riverside County)
  - Vidal Junction (Ri~~verside~~ County) SB
  - Palo Verde (near Phoenix, Ariz.)
- o Elk Hills petroleum production - up to 400,000BPD. May be routed to connect to Sohio pipeline or to Port Hueneme for shipment on tankers.

In addition to the projects already under way or defintely proposed, there are other potential developments which will affect, and be influenced by the region's energy demands. Each of the following will have environmental and other implications for Southern California.

- o Enlargement of geothermal energy, with brine residues and other effects.
- o Extension of OCS leasing program
- o Potential large-scale utilization of solar energy, which has environmental implications:
  - Residential and process heating to reduce demand for natural gas
  - Building cooling
  - Electricity generation (requiring large area)
- o Prospective introduction of coal for power plants with resulting pollution, ash handling, water use problems,
- o Requirements for, and location of power generating facilities - nuclear, fossil-fueled
- o Corridors for ultra-high voltage transmission lines,
- o Extensive use of solid waste as energy.

It is clear from the above that in the near future Southern California will assume even greater importance as an oil and gas reduction and processing center.

Thus far the major mitigating measures proposed deal with specifics of facility design and the types of trade offs discussed in Appendix I.

Staff proposes that if Southern California allow these facilities to be built and add to the pollution load, additional mitigating measures need to be implemented to improve the environmental quality, especially ambient air

quality. For example, in the context of the SOHIO project the region may recommend including additional allocations of natural gas to Southern California to offset increasing fuel oil use and the impacts of the oil facilities. In addition, further improvements in the urban transportation system may be recommended to reduce air pollution caused by vehicles as a way of offsetting the increase caused by oil facilities. These improvements could include the construction of a people mover system and additional mass transit facilities.

Staff needs to do additional work under its AB 250 planning mandate to detail these and other approaches for air quality impact mitigation. Findings should then be submitted for Executive Committee consideration as a policy framework suitable for addressing the broader impacts of the SOHIO project as well as other future energy proposals.

-8-

RESPONSE

Comment #1

The scope of the project is a crude oil transportation system from Valdez, Alaska, to Midland, Texas. It is not within the scope of the project to determine national energy policy. Decisions are in process on the Arctic Gas pipeline and its western legs.

Comment #2

Open-space values of cited areas, including Puente (Chino) Hills, are discussed in Sections 2.1.10.1 and 2.1.10.2, Greater Los Angeles Urban Landscape; impacts on these resources are discussed in Sections 3.1.10.1 and 3.1.10.2; mitigating measures are contained in Section 4.2, including measures to minimize soil erosion and enhance revegetation potential in the Puente (Chino) Hills.

85

RIVERSIDE COUNTY PLANNING DEPARTMENT

PLANNING COMMISSION
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KAY S. CENICEROS, Hemet
JESS E. LILLIBRIDGE, Corona
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A. E. NEWCOMB - PLANNING DIRECTOR

4080 LEMON STREET, 8th FLOOR, RIVERSIDE, CALIFORNIA 92501
TELEPHONE (714) 787-6191

CAM: 70049

January 17, 1977

Project Manager
Bureau of Land Management
Environmental Impact Statement Project Office
Post Office Box 660
Los Alamitos, California 90720

RE: Draft Environmental Impact Statement: Crude Oil Transportation System from Valdez, Alaska to Midland, Texas

Dear Sir:

Thank you for sending us the Draft Environmental Impact Statement on the proposed crude oil transportation system.

Our Environmental Quality Section has reviewed the document, specifically as it regards the conversion of the natural gas transmission line to the crude oil transportation system through Riverside County, and has found the Draft Environmental Impact Statement to be an accurate and adequate discussion of the proposed project, its potential impacts, and proposed mitigation measures.

We appreciate the opportunity to review and comment on this Draft Environmental Impact Statement.

Very truly yours,

RIVERSIDE COUNTY PLANNING DEPARTMENT

A. E. Newcomb

A. E. Newcomb-Planning Director

AEN/pmp

OFFICE OF
CITY ATTORNEY
CITY HALL EAST
LOS ANGELES, CALIFORNIA 90012

BURT PINES
CITY ATTORNEY

REPORT RE

SOHIO OIL PIPELINE PROJECT

REPORT NO. R76 1798

DEC 14 1976

THE HONORABLE, THE COUNCIL OF
THE CITY OF LOS ANGELES
Room 395 - City Hall
Los Angeles, California 90012

Honorable Members:

The California Public Utilities Commission has invited comments on an environmental impact report (E.I.R.) relative to a project which will, if it materializes, have a significant impact upon the City of Los Angeles. The purpose of this report is to (1) apprise your Honorable Body of the nature of the project, (2) highlight some of its impacts upon the people of Los Angeles, and (3) recommend that City Attorney, in cooperatinn with any other City agency you may choose to designate, be instructed to file appropriate comments on the E.I.R. at this initial and important stage of the proceedings. Such comments will not be in opposition to the SOHIO project, but rather will express our concerns that all necessary steps be taken to protect the interests of the residents of the City of Los Angeles to insure an adequate supply of natural gas and to minimize adverse air quality impacts.

This matter is of urgency. Comments to the EIR are due December 20, 1976 and present one of the few opportunities to raise questions relevant to the entire project which may not be available at a subsequent time. The City was not served with the EIR and in order to preserve our opportunity to protect our interests the City Attorney requested an extension of this comment period. However, at this point in time, that extension has not been granted.

Although the SOHIO project is complex (the draft EIR

ATTACHMENT I

itself is 7 volumes), we will only briefly summarize the issues in this report.

The SOHIO Project

Standard Oil of Ohio (SOHIO) is a large producer of natural gas and oil primarily serving the Midwest and East. It seeks to deliver its Alaskan oil to its Midwestern and Eastern markets via tankers from Alaska to Long Beach, and then by pipeline from Long Beach through California to Texas for distribution in the Midwest and East.

The project will necessitate the construction of a major Long Beach marine oil terminal and petroleum storage tanks. A major portion of the oil pipeline will consist of existing Southern California Gas (So Cal) and El Paso pipelines presently dedicated to gas utility service. If approved by the PUC, the use of these pipelines to transport natural gas to California would be discontinued, the pipeline would be connected so as to carry Alaskian oil from SOHIO's Long Beach facilities to Texas for distribution.

Impacts of the Project

The SOHIO project may have a significant impact on Los Angeles in the areas of energy, economic growth and air quality. Further, the SOHIO project can be a means to gain additional natural gas for Southern California. On the negative side, without proper precautions, the project could result in significant limitation of economic growth in the City of Los Angeles, loss of natural gas due to inadequate pipeline capacity and a deterioration of air quality in the South Coast basin.

The following is a brief summary of some of the more important aspects of the SOHIO project:

1. Increased Natural Gas Supply

The City relies on natural gas for residential use, industrial use and steam-electric generation. A continuing deterioration in natural gas supply is detrimental to City residents and the City's economy.

Standard Oil of Ohio is a major producer of natural gas serving areas other than the California market.

SOHIO wishes to utilize part of the Southern California Gas pipeline to transport its crude oil to the Midwest. The needs of the people of Los Angeles could best be met if SOHIO provided additional gas in compensation for the use of the pipelines and as an offset for the other adverse impacts its Long Beach operations may have. The concept of a "trade-off" as an air quality mitigation measure to offset the air quality project has recently been incorporated into the rules of the EPA and ARB. We believe the City should positively urge that in addition to trade-offs by reduction of emissions from existing emission sources, the trade-off of supplying additional natural gas be explored.

2. Gas Pipeline Capacity

A primary component of the SOHIO project is the abandonment of the Southern California Gas pipeline. Before giving up the pipeline dedicated to natural gas service, we should determine that such pipeline is in fact unnecessary. City residents should not be left in a position where necessary natural gas service cannot be obtained because the pipeline capacity has been lost. Nor should utility users of Southern California be forced to bear expenses of building a new pipeline, should additional natural gas become available, because existing pipeline capacity was erroneously released.

3. Economic Impacts

The SOHIO project promises to provide substantial revenue to the City of Long Beach and will provide approximately 400 permanent jobs over a three county area. The additional oil will of course be very beneficial to the East and Midwest and will greatly help the national economy.

No such direct benefits accrue to the City of Los Angeles. In fact, potential economic detriment to the City can result from the SOHIO project. Intervoven with the adverse air quality aspects, discussed below, is the fact that any environmental degradation caused by the SOHIO project could well preclude industrial growth in Los Angeles as the Federal Clean Air Act has

the practical effect of limiting the number of new projects which generate pollution in a given area. Any new industry seeking to locate in the City of Los Angeles is substantially inhibited by EPA and ARB air quality standards.

4. Air Quality

Emissions from tankers, storage facilities and generation of the power required to pump oil through the pipeline could result in substantial deterioration of air quality. These impacts should be mitigated to the fullest extent possible. A commitment of natural gas from SOHIO should be pursued as a mitigating factor, as well as assurances that all other practical methods are implemented to mitigate adverse air quality impacts.

Action Required

Comments on the draft E.I.R., as previously noted, are due December 20, 1976. As was also indicated above, the PUC failed to serve the City of Los Angeles with the EIR when it was distributed on October 19, 1976. To protect the City's interest we have asked for additional time to permit comments to be made by the City, should the Council determine such action appropriate.

It is essential that the City submit comments at this point in time. The EIR process permits the broadest analysis of the entire project. The City can raise questions on all issues relevant to the City's interests. Subsequent regulatory proceedings will be far narrower in scope and may carry with them an added burden of proof on the City not present in the EIR process. Failure to raise these issues in other proceedings. For this reason comments should be made to the EIR.

A federal draft EIS on this project has been prepared and response is due January 10, 1977. Similar comments should be provided on the EIS.

Recommendation

Because of the magnitude of this project and the City's interest, we recommend that the City Attorney, in cooperation with any City agencies the Council deems appropriate, review the EIR and EIS and submit necessary comments to appropriate agencies consistent with the following policy guidelines:

1. The City is not opposing the SOHIO project but is concerned that all necessary steps be taken to protect the interests of the City of Los Angeles regarding a continuation of an adequate supply of natural gas, economic growth and protection of air quality;

2. As a condition for approval of the project, SOHIO should be committed to supply Southern California with additional natural gas to offset the adverse impacts on Southern California and the residents of the City;

3. No undue risk of inadequate natural gas pipeline capacity should occur as a result of the project; and

4. Any adverse air quality impacts should be mitigated by appropriate corrective measures, including an increased supply of natural gas.

Respectfully submitted,

BURT PINES, City Attorney

By
LEONARD SNAIDER
Deputy City Attorney

LS:gh
cc: Honorable Tom Bradley, Mayor
Mr. Ken Spiker, Chief Legislative Analyst
Dr. C. Erwin Piper, City Administrative Officer

CITY OF LOS ANGELES
CALIFORNIA

REX E. LAYTON
CITY CLERK

TOM BRADLEY
MAYOR

OFFICE OF
CITY CLERK
ROOM 395 CITY HALL
LOS ANGELES, CALIF. 90012
485 5705

109

WHEN MAKING INQUIRIES RELATIVE TO THIS MATTER REFER TO FILE NO.
76-5300

December 17, 1976

Honorable Tom Bradley, Mayor
City Attorney (with file)

At the meeting of the Council held December 17, 1976, motion that recommendation of the City Attorney as outlined in the attached Public Works Committee report relative to the Sohio Oil Pipeline Project was adopted.

Rex E. Layton

City Clerk

mls
Attachment

AN EQUAL EMPLOYMENT OPPORTUNITY—AFFIRMATIVE ACTION EMPLOYER

File No. 76-5300

TO THE COUNCIL OF THE
CITY OF LOS ANGELES -1-

Your PUBLIC WORKS Committee
reports as follows:

Your Committee has considered the report of the City Attorney regarding the SOHIO Oil Pipeline Project, as follows.

The California Public Utilities Commission has invited comments on the Environmental Impact Report (EIR) relative to this project which would have a significant impact upon the City of Los Angeles. The City Attorney's office has just found out about the opportunity to respond to the EIR, noting that comments are due by December 20, 1976. The City Attorney expressed concerns that all necessary steps be taken to protect the interests of the residents of the City to insure an adequate supply of natural gas and to minimize adverse air quality impacts.

Standard Oil of Ohio (SOHIO) is a large producer of natural gas and oil primarily serving the Midwest and East. It seeks to deliver its Alaskan oil to its Midwestern and Eastern markets via tankers from Alaska to Long Beach, and then by pipeline from Long Beach through California to Texas for distribution in the Midwest and East.

The project will necessitate the construction of a major Long Beach marine oil terminal and petroleum storage tanks. A major portion of the oil pipeline will consist of existing Southern California Gas (So Cal) and El Paso pipelines presently dedicated to gas utility service. If approved by the PUC, the use of these pipelines to transport natural gas to California would be discontinued, the pipeline would be connected so as to carry Alaskan oil from SOHIO's Long Beach facilities to Texas for distribution.

The City Attorney indicates that the SOHIO project may have a significant impact on Los Angeles in the areas of energy, economic growth and air quality. Further, the SOHIO project can be a means to gain additional natural gas for Southern California. On the negative side, without proper precautions, the project could result in significant limitation of economic growth in the City of Los Angeles, loss of natural gas due to inadequate pipeline capacity and a deterioration of air quality in the South Coast basin.

The City relies on natural gas for residential use, industrial use and steam-electric generation. A continuing deterioration in natural gas supply is detrimental to City residents and the City's economy.

-continued-

Form No. 42

The City Attorney proposes the concept of a "trade-off" whereby SOHIO would provide additional gas to the Southern California area in compensation for the use of the pipelines.

A primary component of the SOHIO project is the abandonment of the Southern California Gas pipeline. It should be determined that such pipeline is in fact unnecessary. Further, utility users of Southern California should not be forced to bear expenses of building a new pipeline, if additional natural gas should become available, because existing pipeline capacity was erroneously released. The SOHIO project promises to provide substantial revenue to the City of Long Beach and will provide approximately 400 permanent jobs. The additional oil would be very beneficial to the East and Midwest and greatly help the national economy. However, no such benefits accrue to the City of Los Angeles. In fact, potential economic and environmental detriment to the City could result from the SOHIO project. It could well preclude industrial growth in Los Angeles as the Federal Clean Air Act has the practical effect of limiting the number of new projects which generate pollution in a given area.

Emissions from tankers, storage facilities and generation of the power required to pump oil through the pipeline could result in substantial deterioration of air quality.

It is essential that the City submit its comments at this point in time as the EIR process permits the broadest analysis of the entire project, with subsequent regulatorty proceedings being far narrower in scope and carrying an added burden of proof on the City not present in the EIR process. In addition, a federal draft EIS for the project has been prepared, with response due by January 10, 1977. Similar comments should also be provided on the EIS.

Your Committee has considered the comments of the City Attorney. However, it was felt that additional information was necessary to be presented because of the magnitude of the project and the City's interest therein. Based on the information available, the Committee members could not agree as to the merits of the City Attorney's recommendation and has requested the various departments and agencies to present information directly to the City Council, noting the time constraints for responding to the EIR.

-continued-

Therefore, your Committee is presenting WITHOUT RECOMMENDATION the recommendation of the City Attorney that the City Attorney, in cooperation with any City agencies the Council deems appropriate, review the EIR and EIS for the SOHIO Oil Pipeline Project (construction of a marine oil terminal at Long Beach and conversion of an existing natural gas pipeline from Texas to an oil pipeline to accommodate Alaskan oil) and submit necessary comments to appropriate agencies consistent with the following policy guidelines:

1. The City is not opposing the SOHIO project but is concerned that all necessary steps be taken to protect the interests of the City of Los Angeles regarding a continuation of an adequate supply of natural gas, economic growth and protection of air quality;

2. As a condition for approval of the project, SOHIO should be committed to supply Southern California with additional natural gas to offset the adverse impacts on Southern California and the residents of the City;

3. No undue risk of inadequate natural gas pipeline capacity should occur as a result of the project; and

4. Any adverse air quality impacts should be mitigated by appropriate corrective measures, including an increased supply of natural gas.

Respectfully submitted,

PUBLIC WORKS COMMITTEE

CDP:jd
12-16-76

OFFICE OF
CITY ATTORNEY
CITY HALL EAST
LOS ANGELES, CALIFORNIA 90012

BURT PINES
CITY ATTORNEY

January 25, 1977

Charles R. Tulloss, Project Manager
SOHIO, EIS Project
P.O. Box 66
Los Alimitos, California 90720

Dear Mr. Tulloss:

Transmitted herewith are the comments of the City of Los Angeles on the Draft Environmental Impact Statement of the U.S. Department of Interior, Bureau of Land Management "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas."

We hope these comments will be useful in helping to fulfill the important responsibility of environmental review request by the National Environmental Policy Act.

Please note that our written comments submitted at the hearing on January 5, 1977, were comments on the California EIR. Those comments were submitted for your information, but we are not requesting that the EIR comments be reproduced in the EIS.

Sincerely yours,

William L. Waterhouse

William L. Waterhouse
Deputy City Attorney
Environmental Protection

WLW:cl

485-5009

Attachment

COMMENTS ON DRAFT EIS

The Draft Environmental Impact Statement of the U.S. Department of Interior, Bureau of Land Management "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas"

Submitted on behalf of
the City of Los Angeles

BURT PINES
Los Angeles City Attorney

By: WILLIAM WATERHOUSE
Deputy City Attorney

By: ROGER J. HOLT
Deputy City Attorney

Prepared by the
Environmental Protection Section

City Attorney's Office
1700 City Hall East
200 North Main Street
Los Angeles, California 90012

(213) 485-5009

JANUARY 25, 1977

I. INTRODUCTION

The City of Los Angeles has an immediate and substantial interest in the proposed SOHIO West Coast to Midland Pipeline Project. The project may have significant impacts on the City in the areas of energy, the ability to obtain adequate supplies of natural gas, economic growth, and air quality. 1/

Although the City of Los Angeles is not taking a position on the merits of the proposed SOHIO project, we believe it is incumbent upon us to fully review and comment upon the Draft Environmental Impact Statement (EIS). In doing so, we are attempting to represent the best interests of the citizens of Los Angeles in assuring that should the project be approved, the most stringent controls will be imposed and adverse energy, environmental and economic impacts mitigated.

The City of Los Angeles is submitted the following comments which are restricted to a preliminary analysis of the impact of abandonment of the pipelines and other air quality issues. We have not had sufficient time to analyze other important issues such as safety and water pollution. Many of our comments simply raise broad but important unanswered questions.

1/ See Los Angeles City Council Report and City Attorney Report, Attachment I.

II. IMPACTS OF NATURAL GAS PIPELINE CONVERSIONS ON CALIFORNIA NATURAL GAS SUPPLIES

The loss of one or two natural gas pipelines could have a severe impact on Southern California's ability to receive natural gas. Continued availability of natural gas is crucial if we are to improve or maintain air quality in the South Coast Air Basin. In spite of this, the two thousand plus page Draft EIS includes only six pages discussing the impact of the proposed natural gas pipeline abandonments on Southern California gas supplies. This de minimus treatment is shocking, especially, in view of the fact that the Federal Power Commission, which has jurisdiction over the proposed El Paso Natural Gas Company (EPNG) pipeline abandonment 2/, has indicated its intention to adopt this EIS for its proceedings. 3/

Not only is the pipeline conversion discussion inadequate, but also it is, in part, incorrect and misleading. At p. I-21, the draft EIS asserts:

1 "Southern California Gas Company has filed an application with the California Public Utilities Commission (PUC) for permission to abandon approximately 121 miles of 30" gas line between Beaumont and Desert Center, California."

This is not true. No such application, to the best of our knowledge, is presently on file or was at the time of preparation of the draft EIS. Such unsupported and incorrect factual allegations serve to amply demonstrate the slipshod, superficial and uninformed nature of the entire subject of pipeline conversion discussion.

2/ Docket No. CP 75-362.

3/ Press release of May 17, 1976, No. 22354.

The Draft EIS should contain a thorough and exhaustive discussion of this question. (The California Draft EIR for this project includes a detailed 29 page section discussing the impacts of the EPNG abandonment even though no California agency has jurisdiction over EPNG pipelines. Draft EIR, supra, Vol. 3, pt.1, $V.)

The current Draft EIS analysis concludes:

> "The proposed conversion of a 30-inch natural gas pipeline, owned by El Paso Gas Company, and presently supplying part of the natural gas to Southern California, would have virtually no impact on the gas supply/demand status on a present-environment basis." Draft EIS, Ch. 3, at 3-391.

2 The assumptions upon which this conclusion rests are questionable, however, since they assume relatively low natural gas supplies moving to Southern California.

First, it now seems quite possible that there will be increased natural gas shipments to California by EPNG of "displaced" Alaskan gas, in the event that Alaskan gas is neither shipped to California by LNG tankers nor by the proposed "western leg" pipeline.

In the final EIS "Alaska Natural Gas Transportation Systems", April 1976 (Alaska EIS), it is noted that approximately 2.25 billion cubic feet per day of Alaskan gas would be available to the lower 48 states when a pipeline is built. Alaska EIS, Vol. 1 at I-B5. That Alaska EIS further notes that Californa could receive a share of this gas indirectly through "displaced" gas rather than directly from a West Coast pipeline:

> "A possible alternative proposed by the staff of the Federal Power Commission suggests that initially the West Coast line not be constructed. This proposal suggests that all the Prudhoe Bay gas be delivered into the Northern Border system and volumes destined for the western United State be delivered by displacement to California through existing unused capacity of both El Paso and Transwestern Pipeline Company systems. With this approach, it could be recommended that the Permian Basin reserves, and to some extent the Hugoton-Anadarko supplies be diverted for use on the West Coast while equivalent volumes of Alaskan natural gas are delivered to the Mid-west via Northern Border. It is also proposed that the Northern Border facilities be sized to accommodate the initial gas volumes of 2.2 billion cfd to be produced from Prudhoe Bay." Alaska EIS, Vol. 1, at I-B27.

The FPC staff, in its "Position Brief of the Commission Staff," December 7, 1976, Docket No. CP 75-96, et. al. (FPC Staff Report), recommends this "displaced" gas alternative:

> "Staff supports the Arctic Gas project modified and improved by the elimination of the "western leg" lateral to California, which has been shown on this record to be high risk, uneconomic, unnecessary, and environmentally unsound." FPC Staff Report at 2.

The Draft EIS (for the SOHIO project) finds that under assumptions of low gas production by EPNG, but with added shipments of 447 MMCFD displaced Alaskan gas, there is no pipeline capacity shortage during the inital phase of the project. Draft EIS Ch.3 at 3-394.

5

It does find, however, that under those assumptions there would be:

> "A rather high (97 percent) load factor during the first year (1981) of pipeline abandonment and Arctic gas shipments." Ibid.

Under assumptions of higher EPNG production, the Draft EIS finds pipeline capacity shortages from the initial phase of the project beginning in 1983. Id. at 3-396. The Draft EIS contains no estimates of pipeline capacity if the second phase of the project is carried out. The EIS should expand its discussion of the impacts of shipments of displaced Alaskan gas, including impacts of a second pipeline abandonment during the second phase of the SOHIO Project. Also, the estimate of 447 MMDFD of displaced Alaskan gas should be justified since, as the FPC Staff Report notes:

3

> ". . . the major portion of the Prudhoe Bay reserves has not been contracted for, the identification and extent of specific markets to be served is merely speculative." FPC Staff Report at 35.

Is it not possible that California's share of displaced Alaskan gas shipped through EPNG lines could be greater than 447 MMCFD, thereby resulting in pipeline capacity shortages even under low EPNG production conditions in the first phase of the SOHIO project?

Second, the ARB has petitioned the FPC for a statement of policy allowing the use of interstate natural gas pipelines to ship intrastate gas during air pollution emergency episodes. Although the ARB's petition was denied without prejudice, related actions can still be expected. What would be the effect on pipeline capacity should such efforts succeed?

6

Third, as a Rand study indicates, proposed conversion of interstate natural gas pipelines to common carrier status could result in increased shipments of natural gas to California through EPNG pipelines.

> "Common carrier status for interstate pipelines appears to offer two major benefits to California, particularly if there is price deregulation. First, California is likely to obtain more gas from the Southwest. With common carrier status, large industrial customers that want to avoid curtailments could purchase gas directly in the field. Since their incentives to obtain gas are apt to be stronger than those of the transmission companies to provide gas for them, gas supplies to California would increase." Rand, "Energy Alternatives for California: Paths to the Future" (hereinafter "Rand Study"), at 105.

4 The EIS should consider the impact of common carrier status for interstate natural gas lines on natural gas supplies to California. Consideration of the impact of diminished natural gas pipeline capacity from Phases I, II, and subsequent phases of the proposed project in connection with these possible increased supplies should be in included in the EIS.

5 In the cases where a shortfall of natural gas pipeline is shown to be possible from the analysis, an estimate of the air quality and other environmental impacts of using alternative fuels for substitute for that natural gas which would be available but for the lack of pipeline capacity should be made and discussed as an impact of the project in the EIS.

7

6 Another problem with the EIS analysis of natural gas pipeline capacity is the exclusive reliance on estimates of average daily gas shipments to California. The use of daily average tends to obscure the possible variance of daily shipments above or below the statistical average. Shortfalls in capacity on days of above average supply therefore cannot be predicted from the data in the EIS. The EIS should include an analysis of the range of possible daily natural gas shipments in the study of impacts of loss of pipeline capacity.

7 In addition, the Draft EIS notes there is a possibility that Elk Hills oil might be transported through the proposed SOHIO pipeline via an interconnection at Redlands, California. Draft EIS Ch. 1 at 1-153. However, the Draft EIS fails to consider what effect this might have on the project and its environmental impacts. Would an Elk Hills connection interfere with projected SOHIO throughput in the initial phase of the project? Would a second phase be proposed earlier? Would an expansion beyond a second phase be likely? The Draft EIS should address all these issues.

8 The alternative of building a new pipeline is given a summary, one page discussion in the Draft EIS, Ch. 8 at 8-70. It is noted that a new pipeline would have capacity equivalent to phases one and two of the proposed project and would have capacity to move SOHIO and Elk Hills Oil while having no impact on gas pipeline capacity to California. This alternative and its environmental impacts should be fully developed in the EIS and compared with the impacts of pipeline abandonment. Without this, the EIS fails to give the decision-maker a rational basis for choice between the project and its alternatives.

9 Finally, although the Draft EIS has a very brief discussion of the impacts of the El Paso Natural Gas Company pipeline abandonment, as noted above, it has no analysis of

8

9 the impacts of abandonment of the Southern California Gas Company natural gas pipelines within California. The EIS should contain a complete analysis of the effects of the project on the pipeline capacities of both gas companies.

III. AIR QUALITY IMPACTS FROM THE PROJECT'S PROPOSED OPERATION

A. Air Quality Impacts of Shipping

Potentially, the most severe adverse air quality impacts could occur from tanker purging and ballasting operations.

As the EIS notes, ballasting and purging operations "could in themselves result in the impossibility of attaining the federal oxidant air quality standards." Draft EIS, Executive Summary at III-5.

The Draft EIS states that SOHIO ships will have no emissions from ballasting operations in port because they will have segregated ballast tanks. However, it is indicated that non-SOHIO ships using the proposed common carrier facility may not have segregated ballast tanks. Indeed, a
10 SOHIO study, "Impact of the SOHIO Project on Air Emissions in the Long Beach Port Area," August 20, 1976, indicates in Appendix 1 that nine of the thirteen non-SOHIO tankers which are anticipated to transport North Slope oil will have less than 15% segregated ballast capacity.

The Draft EIS gives an estimate of emissions per ship from ballasting operations at Ch. 3, 3-120, but there is no estimate given of the total potential emissions from
11 ballasting by non-SOHIO ships over a period of time. The average daily emissions expected from ballasting by non-SOHIO tankers should be given in addition to a more complete "worst day" analysis.

Although SOHIO ships will have no in-port emissions from ballasting, the Draft EIS, Executive Summary at I-7, indicates that the four 80,000 dwt SOHIO ships with only 20%
12 segregated ballast will "adjust" after leaving port. Presumably, this will result in emissions into the South Coast Air Basin. These emissions should be discussed and quantified.

The Draft EIS states that ships will purge in port "only in emergency situations." Draft EIS, Ch.4, at 4-7.

Apparently, a prohibition on purging is to be a requirement of the SOHIO lease with the Port of Long Beach since, as the Draft EIS notes. there are no current state or local restrictions on purging. Draft EIS, Executive Summary, at IV-10. Furthermore, the State of California has no authority to regulate such actions beyond the three-mile limit. Whether California has such powers within state waters will likely be determined by the outcome of the appeal from Arco v. Evans, (1976) __ __F.S._____, C. 75-648, W.Dist.Wash. In that case a three-judge federal court held Washington State's attempt to regulate tanker design and vessel traffic in conflict of federal law. The State of Washington is now appealing that decision to the U.S. Supreme Court.

The contention that purging will nevertheless not occur in port or anywhere near the terminal facility raises some basic questions. First, if the restriction is to be contractual, how is it to be enforced? What
13 would be the penalty for non-compliance by SOHIO? What about non-SOHIO ships? What will be the inspection system by which compliance is monitored? How easily would violations be observed?

Second, what is meant by "anywhere near the marine terminal?" As the Draft EIS indicates: "Pollutants released along sea lanes in coastal waters affect local air quality. The pollutants are diluted and dispersed as they move onshore." Draft EIS, Ch.2, Vol.I, at 2-259.
14 Will ships purge off Palos Verdes? Will they purge off Santa Monica? Off Malibu? The Draft EIS should specify where ships will purge, and if any purging is to occur anywhere near the South Coast Air Basin, it should include estimates of the expected emissions which will reach the Air Basin based upon air trajectory and dispersal patterns of such emissions.

Third, the Draft EIS states that the four 80,000
15 dwt SOHIO tankers will not have inert gas systems. Draft EIS, Executive Summary at I-7. Must these ships purge in

15 in port as a safety precaution?

The Draft EIS is ambiguous as to whether all ships or only SOHIO ships will be prohibited from purging in port.
16 If some tankers may purge in port, estimates of the total potential emissions on a daily or other periodic basis from that activity should be given.

Finally, estimates of emissions from ballasting, purging, and all other tanker operations should also be given
17 for the second phase of the project, any additional potential phases of the project, so that an overall view of the possible impacts can be foreseen.

B. Impacts of an Additional 200,000 Barrels Per Day of Oil in Southern California

1. Impacts in General:

According to the Draft EIS:

> "A minimum of 200,000 barrels per day of crude supply from the proposed project could be siphoned off at an inland storage terminal near Long Beach and distributed to Los Angeles area refineries for use in West Coast markets." Draft EIS, Executive Summary, at I-1 - I-2.

The Draft EIS, however, fails to discuss the
18 environmental effects of refining, distributing, and consuming this oil in the Los Angeles area.

If SOHIO is proposing to bring an additional 200,000 barrels per day of oil into Los Angeles over present supplies, then the Draft EIS must consider the environmental impacts of
19 that action and alternatives to it. In terms of air quality, the Draft EIS must estimate the emissions resulting from its use by power plants and other consumers must also be considered. These emissions should be compared with emissions from the following alternatives:

(1) no 200,000 barrel per day growth in demand for oil through energy conservation measures;

(2) increased use of natural gas (see mitigation measures discussion, infra); or

(3) use of other energy sources (solar, geothermal, etc.).

2. Possible Increase in Southern California Supply Beyond an Additional 200,000 Barrels Per day:

The FEA Draft Report "North Slope Crude: Where To---How?" 4/ (hereafter FEA Report) also notes that there is a large incentive for North Slope producers to market their oil on the West Coast, thereby saving transportation costs:

> "In summary, the marketing and refining patterns of the major North Slope producers will tend to facilitate the development of more aggressive West Coast marketing on the part of the two firms that presently have West Coast marketing capacity (ARCO and EXXON). The marketing will be, however, of a high volume, low overhead nature operating through fewer and fewer retail outlets.
>
> "In the case of SOHIO, the cost of transporting crude to the East Coast will facilitate the development of exchange agreements with West Coast partners (most likely SOCAL) 5/ to reduce to a minimum the amount of crude flowing East.
>
> "It is to the full advantage of all North Slope producers to market as much crude on the West Coast as possible, reducing the amount of North Slope surplus that has to be moved East. The major

4/ "An Analysis of the alternatives Available for the Transportation and Disposition of Alaskan North Slope-Crude", October 18, 1976.

5/ Standard Oil of California

North Slope participants are expected to fully exploit this advantage." FEA Report at p.175.

The FEA Report's analysis as well as the statement in the Draft EIS that a "minimum of 200,000 barrels per day" could be consumed in Los Angeles raises the obvious question of what the maximum consumption in Los Angeles might be. As the Draft EIS notes in the Executive Summary at VIII-3, one possible alternative to the proposed pipeline is consumption of all the North Slope oil on the West Coast. The environmental impacts of any increased consumption of North Slope oil in Los Angeles beyond the 200,000 barrels per day figure should be fully discussed.

20

3. Possible Increase in Oil Refining in Los Angeles:

21 The Draft EIS fails to discuss the environmental impact of refining an additional 200,000 barrels per day or more of Alaskan crude in Los Angeles. At Draft EIS, Ch. 3, p.3-111, it is asserted that the project will "result in no net change in refinery throughput." The FEA Report notes, however, that expensive refinery conversion and expansion will be necessary to refine Alaskan crude;

> "Estimates of the costs of converting refineries which were specifically designed and constructed to utilize low sulfur, light crudes to utilize heavy, high sulfur North Slope crude vary from refinery to refinery. SOHIO spokesmen have estimated the capital investment cost range to be between 1,200 and $3,000 per daily barrel, depending on the size of the refinery. In testimony before the Federal Power Commission, SOHIO's representative stated:
>
> 'To place that in perspective, a new refinery to process low sulfur oil might cost $2,000 a daily barrel,

> so that cost of conversion to a sour crude facility would probably exceed the cost of building a new refinery to process low sulfur crude oil . . . Most of the refineries have been constructed at a cost of $1,000 per daily barrel and the cost of converting that today may be two or three time what the cost of the construction of that refinery initially may have been.'" FEA Report, supra, at p.63.

22 Although the SOHIO statement is to the effect that it may be more expensive to convert existing refineries than build new ones for low-sulfur crude, would it also be more cost effective to build new refineries for high-sulfur Alaskan crude than converting existing refineries?

The FEA Report also projects that the largest refiner of North Slope crude in Los Angeles will be Standard Oil of California (SOCAL), which will increase its refining capacity by 170,000 barrels per day at its El Segundo refinery. FEA Report at p.125.

Finally, the FEA Report states that SOCAL has plans for expanding refinery capacity for North Slope Oil even though it has only a fractional share of North Slope crude supplies while SOHIO has no refinery capacity on the West Coast. It concludes:

> "SOHIO gives no evidence of contemplating marketing entry on the West Coast and in fact seems to be concentrating its efforts on its new marketing outlets under the British Petroleum Corporation flag on the Eastern seaboard. However, the availability of large amounts of SOHIO crude on the West Coast creates a friendly climate for the possibility of either long term or short term

> exchange agreements between SOCAL and SOHIO for North Slope crude. The advantage of an agreement of this nature is apparent to both parties. SOCAL obtains a secure crude source for its new refinery capacity in California, while SOHIO is not required to pay the additional transportation charges associated with moving the crude east. If SOHIO could arrange exchanges on the East Coast from SOCAL, the arrangement would be mutually advantageous." FEA Report at p.175.

23 On the basis of the FEA Report, the Draft EIS should include a discussion of the environmental impacts of refining SOHIO's oil at the SOCAL El Segundo refinery either as part of the project, or as a likely project alternative.

4. Impacts if North Slope Oil is Substituted for Other Oil:

24 Even if the 200,000 barrels per day of oil will not increase existing supply but will rather substitute for oil currently being supplied from other sources, the EIS must still identify and discuss any differential environmental impacts resulting from use of Alaskan oil. What would be the impacts of substituting North Slope crude for oils currently received which are lower in sulfur content? What would be the impacts if North Slope crude substitutes for oil which is refined before it reaches Southern California?

C. Terminal Capacity

1. Phase I:

The Draft EIS indicates that SOHIO plans to import 700,000 barrels per day of crude oil from the North Slope of Alaska to the Long Beach terminal. However, the Draft EIS indicates that, as a common carrier, the marine terminal will also receive non-North Slope oil:

> "The applicants proposal for establishment of a crude oil transportation system is not limited to the transportation of Alaskan Prudhoe Bay production but also considers the transportation of crude oil from other West Coast sources: Southern California Outer Continental Shelf reserves, California State-owned tidelands, the Elk Hills National Petroleum Reserve in Central California." Draft EIS, Executive Summary, at I-32 - I-36.

The storage capacity at the terminal is to be 3,690,000 barrels, and the terminal to Hynes facility pumping capacity is to be 1,400,000 barrels per day. Therefore, the limiting factor on volume of oil handled by SOHIO is the size of the pipelines from Hynes to the Los Angeles refineries (200,000 barrels per day) and from Hynes to Midland, Texas (500,000 barrels per day). Port of Long Beach, et al., Draft EIR, "SOHIO West Coast to Mid-Continent Pipeline Project," Volume I, Pt. 1, at C- 2.

These facts raise the following questions:

25 (1) What is the estimate of oil reaching the terminal from non-SOHIO importers?

26 (2) How will additional non-SOHIO oil be accommodated, given the 700,000 barrel throughput capacity out of the Hynes facility?

(3) What volumes of non-North Slope oil, e.g., California O.C.S., tidelands, Elk Hills, foreign and other oil, will be handled by the project? 27

(4) Why is the capacity of the terminal to Hynes link double the capacity of the project out of the Hynes facility? 28

(5) If Phase 2 is never built, are there alternative ways the terminal could be used at full capacity? What are these alternatives? 29

(6) To what extent can the Los Angeles refineries pipeline connection be expanded beyond 200,000 barrels per day, thereby raising the throughput capacity of the project? 30

2. Phase 2:

The Draft EIS states:

> "The SOHIO Transportation Company of California has indicated the possibility of a second phase for the project which would involve abandonment of a second 30 inch natural gas pipeline currently in use. If and when such an expansion need occurred, it could be accomplished by adding additional pump stations and making pipeline alterations to tie-in the second natural gas line, creating capability for an increase in throughput capacity." Draft EIS, Executive Summary at I-38.

The Draft EIR, supra, was less discrete about the possibility that SOHIO would push for a second phase;

> "California should be aware of the impetus which will likely exist for an expansion of the SOHIO project. Given the projection of continued PADD versus crude surpluses above the initial

> project capacity and the economies involved in the expansion of an existing pipeline versus construction of a new line, it is likely that SOHIO would strongly urge for an enlargement of its own crude line rather than allow the surplus crude to be evacuated by a second eastward crude pipeline or by one of the proposed tanker routes." Draft EIR, Executive Summary, at p. 80-81.

We recognize that additional environmental studies would be necessary before a second phase could be approved. Nevertheless, such an expansion appears to be an integral part of the project in view of the fact that all of the new pipelines to be built during the initial phase will have at least 1,000,000 barrels per day capacity, anticipating a second phase expansion. In addition, SOHIO's projections show a surplus of approximately 800,000 barrels of oil per day on the West Coast by 1982, indicating a need for expansion at that time. Draft EIS, Executive Summary, at I-4. We, therefore, conclude that a fairly detailed and complete analysis of the environmental impacts of a second phase is appropriate at this time, and should appear in the EIS. 31

3. Further Project Expansion Beyond a Second Phase:

That a second phase expansion is being considered raises the following questions about the ultimate size of the terminal and pipeline:

(1) What is the initial capacity of the Long Beach terminal? 32

(2) What will be the final capacity of this terminal? 33

34 (3) What additional phases are being considered?

(4) What are the ultimate plans of SOHIO and the Port of Long Beach? 35

4. Plans for Other Long Beach Oil Terminal Facilities:

This project would be one of the first super-ports for oil super tankers. If it is built, it may establish Long Beach as a focal point for other oil terminal projects. The cumulative environmental impacts of various oil terminal projects could be substantial. For examples, the Draft EIS for the Proposed General Plan, 1975, of the Port of Long Beach indicates at Vol. 1, p. B-16 that hydrocarbon emissions from oil tanker operations could rise from 18 tons per day in 1975 to 54 tons per day in the year 2000 under the proposed plan. At that time, hydrocarbon emissions from the Port of Long Beach would constitute 5% of total South Coast Air Basin emissions. Id.

The Draft EIS should include a description of Long Beach's overall oil terminal, storage and transportation plans and their environmental impacts, and a discussion of how this project is related to or may facilitate other plans and proposals. 36

D. Lack of Data Necessary For Analysis of "Trade-Offs" For Air Pollution Impacts of the Project

In testimony at the public hearing of December 6, 1976, on the Draft EIR, Mr. Robert L. Schaadt, Vice President of SOHIO Transportation Company, indicated that he was cognizant of the concept of "trading-off" emissions from the project by eliminating or reducing emissions from other sources. Such trade-offs are required if any new source capable of emitting substantial amounts of air contaminants is to be permitted, under New Source Review rules, to be constructed in the South Coast Air Basin. Mr. Schaadt

stated that "we are totally dedicated to the trade-off principle as a means of assuring the people of Southern California that no increase in emissions will occur because of our project." Reporter's Transcript at p. 312.

In discussing the use of trade-offs, Mr. Schaadt said the following:

> "We believe that the introduction of the modern U.S. Alaskan tanker fleet will by itself reduce emissions in the L.A. Basin as calls by foreign flagg tankers are able to be substantially reduced.
>
> "Beyond the emission reductions achieved by the new tankers, we indicated to the preparers of the EIR that as an example of a potential trade-off they might use they Hynes tank farm in preparing the EIR document.
>
> "We emphasized that the inclusion of this facility was tentative and dependant upon negotiations with the present owner.
>
> "This, I believe is made clear in the EIR document. There has been a great deal of discussion about what the actual emission values will be from our proposed project. This issue is receiving attention by SOHIO, various consultants and the appropriate agencies.
>
> "Once these final numbers have been obtained and agreed upon by the appropriate agencies, we are prepared to obtain the required trade-offs.

"Results from our research and investment in developing trade-off potential has been encouraging. However, we are hesitant to make known at this time the specific sites and procedures we intend to use to accomplish further trade-off values.

"The reason for this hesitancy is the fact that there are no clear official procedures in the State of California whereby an applicant for a project can be assured that if he obtains trade-offs he will receive appropriate credit for them.

"Accordingly, until such time as we know what the rules will be regarding trade-offs, until we can have some assurance that the regulations will not be changed immediately after announcing what those trade-offs might be, we hesitate to indicate the potential trade-off sources we will use." Reporter's Transcript pp.310-311.

As Mr. Schaadt's statement indicates, SOHIO intends to claim trade-offs from an improved tanker fleet as well as other reductions such as the Hynes facility, but SOHIO is not willing to disclose "specific sites and procedures" or other hard data on possible trade-offs at this time.

SOHIO's expectation that the EIS process mandated by N.E.P.A. can proceed without data on trade-off is incorrect. Specific and detailed date on air pollution trade-offs for the project are necessary to determine what the ultimate air quality impact will be. The failure to

provide this information frustrates the public comments on the project as N.E.P.A. intends. Indeed, the recently released California Air Resources Board (A.R.B.) report 6/ notes the A.R.B. cannot fully evaluate SOHIO's proposal until specific trade-off proposals are disclosed. Without this data, the Draft EIS is fatally inadequate.

Review of the project under N.E.P.A. cannot legally proceed until specific trade-off proposals are disclosed in an addendum to the Draft EIS, and an opportunity for comments concerning such trade-offs is provided.

An addendum should be prepared including detailed estimates of the proposed trade-offs for:

37

(1) tanker emissions;
(2) terminal emission;
(3) storage tank emissions;
(4) pipeline emissions;
(5) emissions created as a result of electricity generated for the project; and
(6) any other emission created by the project, such as emissions created during construction.

Any analysis of trade-offs must include data on existing emission from facilities being utilized for trade-offs, as well as detailed projections on the amount of new emissions. The Draft EIS fails to provide this information.

If the closure of old tanks at the Hynes facility were to be used as a trade-off for construction of new storage tanks, the following issues would have to be addressed:

38

(1) What emissions will result from the new facilities?

6/ "Preliminary Analysis of the Proposed SDHIO Marine Terminal at the Port of Long Beach" December 7, 1976, SS-76-035.

38

(2) What are the current total emissions from APCD rules and regulations?
(3) If SDHIO purchases the Hynes facility from ARCO, what will ARCO do with the petroleum being stored at Hynes?

E. Air Quality Impacts of Construction

The Draft EIS indicates that approximately 2.6 million tons of quarry rock will be barged from Catalina Island to construct a new breakwater south of Pier J. Draft EIS, Ch. 1, at I-29. However, the air quality impacts of such a barging operation appear to have been omitted from the environmental impacts discussion of the Draft EIS. This omission should be corrected.

39

IV. MITIGATION MEASURES

We propose that should the project be approved, the following mitigation measures be imposed as conditions of approval to the fullest extent possible:

(A) Acquisition of additional gas supplies to mitigate the adverse air quality impacts of the project. The Draft EIS mentions the possibility of refining surplus crude and making it available as synthetic natural gas (SNG). Draft EIS, Ch. 4, at 4-12. Whether this particular proposal would be an attractive mitigation measure depends upon the environmental impacts of making SNG, which the Draft EIS fails to discuss. However, in general, acquisition of increased supplies of natural gas would be an especially promising mitigation measures which could do much to ease concerns about the potential air quality impacts from the project. This proposed mitigation measure deserves serious attention and should be discussed in the EIS.

40

We are cognizant of the fact that SDHID contends they cannot supply natural gas to California because they have granted all purchase rights to their natural gas reserves to Columbia Gas Transmission Corporation. No information has been provided in the Draft EIS to provide the basis for an analysis of the firmness of that commitment, however.

In any case, alternative methods of requiring a commitment of natural gas, either by SOHIO or non-SOHID users of the terminal, should be explored prior

to approval of the project. For example, EXXON has stated that they "have entered into technical discussions with SOHIO regarding possible participation in, and oil shipment through the proposed crude
40 oil pipeline across the Southwestern United States." 7/ This statement leads us to query whether assurances of supplies of natural gas from EXXON could be made a condition of approval of the project. Other such mitigation measures must be explored.

(B) Use of best available technology in all
41 aspects of the project to minimize environmental impacts.

(C) Adoption of stringent tanker operation rules and regulations by the Port of Long Beach, the Coast Guard, or other appropriate governmental agencies. These
42 rules and regulations should be designed to minimize environmental impacts in the South Coast Air Basin from purging, ballasting, venting, use of high sulfur fuel, and other tanker operations.

(D) Installation of pierside vapor recovery systems to prevent emission from purging and ballasting operations. If ships without inert gas systems or without sufficient segregated
43 ballast caoabilities are to call at the terminal, then the EIS should discuss the feasibility of land-based emission control systems similar to vapor recovery systems currently used in other oil transporation operations.

7/ Statement by C.R. Setter, Senior Vice President, EXXON Company, before the U.S. Senate Interior and Insular Affairs and Commerce Committees, December 7, 1976.

(E) Location of oil storage tanks outside the South Coast Air Basin. The Rand Study, supra, mentions the possibility of locating
44 oil storage facilities outside the Air Basin as a way to minimize air pollution impacts. Rand Study at 49-50. The EIS should discuss the feasibility of such a mitigation measure.

V. LEGAL ANALYSIS

A. General Requirements for a Legally Adequate EIS

The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §4321, et.seq., establishes a national environmental policy whereby it is the continuing responsibility of all federal agencies to use "all practicable means and measures . . . to create and maintain conditions under which man and nature can exist in productive harmony." In order to implement that policy, the Act contains important procedural requirements which are designed to ensure that all federal agencies give full consideration to environmental values in their decision-making processes.

B. The Duty to Consider Environmental Factors

Section 102(2)(B) requires all agencies of the federal government to:

> ". . . identify and develop methods and procedures . . . which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision making along with economic and technical consideration." 42 U.S.C. §4332(2)(B). (Emphasis added.)

To implement this duty to consider environmental factors, §102(2)(C) requires that "to the fullest extent possible" all federal agencies must prepare a detailed environmental impact statement in connection with "major federal actions significantly affecting the quality of the human environment." 42 U.S.C. §4332(2)(C). As the Supreme Court stated:

> "NEPA's instruction that all federal agencies comply with the impact statement requirement--and with all the other requirements of §102--'to the fullest extent possible.' 42 U.S.C. §4332, is neither accidental nor hyperbolic. Rather, the phrase is a deliberate command that the duty NEPA imposes upon the agencies to consider environmental factors not be shunted aside in the bureaucratic shuffle." Flint Ridge Development Co. v. Scenic Rivers Assoc., (1976) 425 U.S. 902, 49 L.Ed 2d 205, 96 S.Ct. 2430, 2437.

NEPA sets forth stringent requirements with respect to the contents of an Environmental Impact Statement. Section 4332(2)(C) requires all agencies of the Federal Government to:

> "Include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on-
>
> (i) the environmental impact of the proposed action,
>
> (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
>
> (iii) alternatives to the proposed action, the relationship between local short term uses

of man's environment and the maintenance and enchantment of long term productivity, and

(iv) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Council of Environmental Quality Guidelines further provide that the statement must consider the cumulative impacts of proposed agency actions. 40 C.F.R. §1500.8(a)(1).

Prior to making a detailed statement, moreover, a federal agency must consult with and obtain the comments of other federal agencies affected by the action. Once a draft impact statement is prepared, it must be circulated to all appropriate federal, state and local agencies for review and comment. All comments must be incorporated into a final statement which is then to "accompany the proposal through the existing agency review processes." 42 U.S.C. §4332(2)(C). Section 120(2)(C) is NEPA's most important procedural requirement in that it compels the development of a record from which it can be determined whether environmental factors have in fact been considered in the agency decision-making process.

NEPA case law firmly establishes the importance of the duty, embodied in §102(2)(C), to consider environmental factors in agency review processes. In Calvert Cliffs' Coordinating Committee v. United States AEC, 449, F.2d 1109 (D.C. Cir., 1971), that duty was given its definitive judicial gloss. Reviewing AEC hearing board guidelines that did not require hearing officers to consider environmental factors in licensing nuclear facilities,

Judge J. Skelly Wright ruled that the purpose of §102(2)(c) was to require agencies to consider environmental values:

> "The question here is . . . whether it is enough that environmental data and evaluations merely "accompany" an application through the review process, but review no consideration whatsoever from the hearing board.
>
> "We believe that the Commission's crabbed interpretation of NEPA makes a mockery of the Act. What possible purpose could there be in that §102(2)(C) requirement (that the 'detailed statement' accompany proposals through agency review processes) if 'accompany' means no more than the physical act of passing certain folders and papers, unopened to reviewing officials along with other folders and papers? . . . The word 'accompany' in §102(2)(C) must not be read so narrowly as to make the Act ludicrous. It must, rather, be read to indicate a congressional intent that environmental factors, as complied in the 'detailed statement' be considered through agency review processes." 449 F.2d at 1117, 1118.

Calvert Cliffs, which is regarded as the leading case on

the duty to consider environmental factors in agency decision making, establishes that compliance with § 102(2)(C) must "amount to full good faith consideration of the environment" and "if a decision is reached without consideration of environmental factors - conducted fully and in good faith - it is the responsibility of the courts to reverse." 449 F. 2d at 1113, 1115.

CEQ guidelines interpreting NEPA also confirm the duty of all federal agencies to consider environmental factors in agency decision making. The guidelines require agencies "to build into their decision-making process, beginning at the earliest possible point, an appropriate and careful consideration of the environmental aspects of proposed action in order that adverse environmental effects may be avoided or minimized and environmental quality previously lost may be restored." 40 C.F.R. § 1500.1(a). (Emphasis supplied.) CEQ policy with respect to environmental impact statements is that all federal agencies shall:

(1) Provide for circulation of draft environmental statements to other federal, state and local agencies and for their availability to the public in accordance with the provisions of these guidelines;

(2) Consider the comments of the agencies and the public;

(3) Issue final environmental impact statements responsive to the comments received. 40 C.F.R § 1500.2(b).

CEQ guidelines, in short, mandate all federal agencies, in the preparation and circulation of environmental impact statements, to identify and discuss all existing opinions on the environmental effects of proposed administrative action, to consider those opinions and to have those opinions

accompany the agency proposal through its existing review processes.

C. The Standard of Strict Compliance

Judicial interpretation of NEPA has firmly established that its procedural requirements "are not highly flexible," but rather "establish a strict standard of compliance." Calvert Cliffs, supra, at 1112. The Calvert Cliffs case, in a holding adopted by courts too numerous to mention (see, e.g., National Helium Corp. v. Morton, 455 F.2d 650 (10th Cir. 1971); Daly v. Volpe, 350 F. Supp. 252 (W.D. Wash. 1972)), established a rigorous standard for compliance with § 102(2)(C):

> "Of course, all of the §102 duties are qualified by the phrase 'to the fullest extent possible.' We must stress as forcefully as possible that this language does not provide an escape hatch for footdragging agencies; it does not make NEPA's procedural requirements somehow 'discretionary'. Congress did not intend the Act to be such a paper tiger. Indeed, the requirement of environmental consideration 'to the fullest extent possible' sets a high standard for the agencies, a standard which must be rigorously enforced by the reviewing courts.
>
> "Thus, the §102 duties are not inherently flexible. They must be complied with to the fullest extent, unless there is a clear conflict of statutory authority, Considerations of administrative difficulty, delay or economic cost will not suffice to strip the section of its fundamental importance." 449 F.2d at 1114, 1115.

The purpose of NEPA's procedural requirements, particularly the § 102(2)(C) impact statement process, is to guarantee

that environmental values are fully considered in administrative decision making. Compliance "to the fullest extent possible" effectuates that purpose. Thus, "the procedural duties, the duties to give full consideration to environmental protection, are subject to a . . . strict standard of compliance." 449 F.2d at 1128. Any failure by Interior to comply with NEPA procedural requirements must be measured against that standard.

D. Deficiencies in the Draft EIS

Measured against the standard of strict compliance, we believe that the Draft EIS is legally inadequate for the following reasons:

(1) Failure to provide adequate data on the possible impacts of the project. Here we are particularly concerned about Mr. Schaadt's statements, discussed, supra, po. 14-17, about the tentative nature of the data on air quality and proposed trade-offs. We are also greatly concerned about the failure to consider the impact of pipeline abandonment should the FPC's staff recommendation for the shipment of additional natural gas from Texas to California be adopted. This point emphasizes the need to coordinate natural gas and oil policies. Finally, we don't think the project can be segmented as a means to avoid a discussion of the impacts of Phase 2.

(2) Failure to discuss all possible mitigation measures. We include under this section: 1) the failure to fully analyze methods to provide California with additional supplies of natural gas as a trade-off for projected emissions; 2) types of technology which can

be used to mitigate adverse impacts; 3) necessary regulations for reducing impacts of tanker operations; and 4) possible pierside vapor recovery installations to prevent emissions before ballasting and purging operations.

(3) Failure to discuss all realistic alternatives, and their relative environmental impacts. As discussed above, we are concerned not only with a discussion of alternative methods of shipment and alternative locations, but also alternative ways of implementing the SOHIO proposal, e.g., building a new pipeline rather than converting natural gas pipelines.

(4) Failure to discuss the cumulative impacts of the project. A major failure of the Draft EIS is not simply the failure to discuss the impacts of Phase 2, but to analyze the impacts of other uses of the terminal, and the extent to which this project may facilitate establishing Long Beach and the South Coast Air Basin as the energy facility for the West Coast.

A full discussion of possible and cumulative impacts, alternatives, and mitigation measures is critical to the Draft EIS process. An EIS is intended as a document which will provide decision makers with information sufficient to make informed choices with respect to actions affecting the environment. The key to this process is that direct and indirect impacts are fully understood, and mitigation measures and their environmental impacts be fully discussed. Only if there is an adequate discussion of impacts and options can the decision makers make a systematic, reasoned, and informed choice.

The requirement to fully discuss alternatives is clear. As stated in a leading federal case interpreting

NEPA:

> "The requirements for a thorough study and detailed description of alternatives, which was given further congressional emphasis in section 4332(2)(d), is the linchpin of the entire impact statement. Without the detailed statement, the conclusions and decisions of the agency appear to be detached and unrelated to environmental concerns." (Citations omitted) Monroe County Conservation Council, Inc. v. Volpe, (2d Cir., 1972) 472 F.2d 693, 697-698.

It is not sufficient for the Draft EIS to merely mentioned an alternative "in a conclusory and uninformative manner." Monroe County Conservation Council v. Volpe, supra. As the First Circuit Court of Appeals points out:

> "A conclusory statement 'unsupported by empirical or experimental data, scientific authority, or explanatory information of any kind' not only fails to crystalize issues [citations omitted] but 'affords no basis for comparison of the problems involved in the project and the difficulties involved in alternatives." [Citations omitted] Silva v. Lynn, (1st Cir. 1973) 482 F.2d 1282, 1287.

Discussion of alternatives must include a detailed discussion of the environmental impact of each proposed alternative. NRDC v. Morton, (D.C. Cir. 1972) 485 F.2d 827, 834.

The requirement for a full discussion of alternatives interfaces with the requirement that mitigation measures be carefully evaluated. In Calvert Cliffs' Coordinating Committee v. AEC, (D.C. Cir., 1971) 449 F.2d 1109, the court, in analyzing the closely analogous federal statute stated:

> "NEPA requires that an agency must - to the fullest extent possible under its other statutory obligation - consider alternatives to its action which reduce environmental damage. That principle establishes that consideration of environmental matters must be more than a pro forma ritual. Clearly, it is pointless to 'consider' environmental costs without seriously considering action to avoid them." Calvert Cliffs, supra at 1128.

The City is also greatly concerned by the failure of the Draft EIS to adequately discuss Phase 2 of the project. As we have already pointed out, some parts of the project appear to be of a larger scale than necessary.

In Swain v. Brinegar, (7 Cir., 1976) 542 F.2d 364, 369, the court in the context of a closely analogous highway construction situation, defined a three-pronged test for exclusion of future phases of a project from an EIS:

> "1. Does the proposed segment have a substantial utility independent of future expansion?
>
> "2. Would its construction foreclose significant alternative routes or locations for an extension from the setment?

"3. If, as here, the proposed segment is part of a larger plan, has that plan become concrete enough to make it highly probably that the entire plan will be carried out in the near future?"

We submit that the limitation of the coverage of the EIS to only the initial phase of the SOHIO project here violates the second and third prongs of the above test. Construction of the initial phase of the SOHIO project would realistically foreclose consideration of alternatives to a second phase since alternatives would involve costly construction of extensive new pipeline systems, whereas Phase 2 of the SOHIO project would involve merely connection of a second converted natural gas pipeline into an already existing system. It is clear that there is a "larger plan" consisting of a second phase and possibly more, and that this larger plan is "concrete enough to make it high probable" that SOHIO will attempt to carry out the entire plan "in the near future." As the California Draft EIR noted ". . . it is likely that SOHIO would strongly urge for an enlargement of its own crude line . " Draft EIR, Executive Summary, at 80-81, cited supra.

At the very least, the approval of Phase 1 would have a cumulative secondary or "growth inducing impact" with respect to encouraging the development of Phase 2 of the project. NEPA requires that cumulative impacts of projects be discussed. 40 C.F.R. §1500.8(a)(1) and (3)(i)

E. Inadequacies of the Draft EIS Requires Preparation of an Addendum, Subject to Further Public Comment.

The important information-generating function of the Draft EIS will be frustrated unless an addendum to the Draft EIS is prepared and an opportunity is provided to allow comments on the addendum.

In Appalachian Moutain Club v. Brinegar, (D-N.H., 1975) 394 F.Supp., 105, 121, the court streased the importance of the opportunity to comment in the overall NEPA, EIS process:

> "NEPA is at the 'very least a disclosure law.' [citation omitted] In order to effectuate the disclosure aspects of NEPA, the CEQ established that an EIS must undergo two stages of review.
>
> "In the first stage, a draft impact statement is prepared and circulated to the public and various agencies for comments and criticisms. This is the vital stage, for it is here that outside review can vitiate 'objective errors or excessive bias in an EIS.' [citations omitted] This is the only time when the public and outside agencies are able to closely analyze the impact statement and their comments, provided that they are responsible, must be included in the final EIS. [citation omitted]
>
> "By requiring opposition viewpoints to be included in the final EIS, Congress intended for those beyond the decisional agency to be cognizant of all 'environmental tradeoffs' that may occur if the project was approved. A balanced EIS is a vehicle for responsible decision making.
>
> "There cannot be responsible

> decision making when data appear in the final EIS without being subject to the critical evaluation that occurs in the draft stage."
> (Emphasis added)

Here, it is apparent to the City of Los Angeles that substantial new information will be required in the Draft EIS. Should the Bureau of Land Management decide merely to provide responses to comments without providing the public and public agencies adequate opportunity to comment on the new information generated thereby, both decision makers and the public would be denied an important opportunity. We, therefore, strongly recommend that an addendum be prepared which would incorporate all comments and responses to comments, and that the addendum be subject to further public and agency review and comment.

VI. CONCLUSION

We are optimistic that these comments will be helpful in preparing a legally adequate Draft EIS. When an addendum is released, as we believe it must be, providing the data and analysis which is not now available, many of our questions will hopefully be answered.

In any case, be assured that it is our intention that: 1) all impacts are fully understood by the decision makers and the public before action is taken on this project, and 2) any adverse impacts to the environment and economy of the Los Angeles area be mitigated to the fullest extent possible, should the project eventually be approved.

OFFICE OF
CITY ATTORNEY
CITY HALL EAST
LOS ANGELES, CALIFORNIA 90012

BURT PINES
CITY ATTORNEY

February 16, 1977

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SOHIO E.I.S. PROJECT
Bldg. 55, Los Alamitos NAS
P.O. Box 660
Los Alamitos, California 90720

Attention: CANDY JOHNSON, Public Affairs Director

Dear Ms. Johnson:

On or about February 10, 1977, we received from your office the following documents:

Final Report, BLM--SOHIO Project, Vol. 5, Air Quality

Final Report, BLM--SOHIO Project, Vol. 8, Energy Supply/Demand

Air Quality Impact of the Proposed SOHIO Tanker Fleet on Port Valdez, Alaska

SOHIO Crude Oil Transportation System Tanker Traffic Study

We have now had an opportunity to review in some detail the volumes on air quality and energy supply/demand.

Although these two volumes do include somewhat more detailed discussion and facts than those sections of the E.I.S. dealing with air quality and energy supply/demand, these documents supply essentially no new material which either adds or detracts from our comments on the Draft E.I.S. previously submitted to B.L.M. dated January 25, 1977.

We, therefore, respectfully submit that those comments still hold and deserve your full consideration and response. We reassert the legal inadequacy of the Draft E.I.S. and the requirement that an appropriate addendum be prepared, together with a detailed, reasoned response to our comments of January 25, 1977.

Should you differ with the conclusions expressed above in any particular, we request that you notify us of same. With reference to our comments in the E.I.S. we request that your response make specific pagings and subject matter reference to the "supplementary reports" which, you contend, supply the information sought.

We wish to thank you for sending the aforementioned volumes for our consideration. Feel free to contact us should you have any further questions about our position.

Very truly yours,

BURT PINES, City Attorney

BY: ROGER J. HOLT
Deputy City Attorney
Environmental Protection

RJH:cl

(213) 485-6445

RESPONSE

Comment #1

This incorrect information was contained in the Executive Summary, not in the DES. The final Executive Summary has been revised to reflect this comment.

Comment #2

The best available data at the time the Energy Supply/Demand study was prepared were used. BLM believes the scenarios presented in Sections 2.1.16.5, 3.1.16.5 and the Energy Supply/Demand study adequately assess the various gas supply possibilities.

Comment #3

Any discussion of the impacts of the expanded second phase of this project would require an additional separate ES. Regarding the estimates of Alaskan gas, the best available data at the time the report was prepared were used in the DES. See response to Comment 2 above.

Comment #4

Consideration of the impacts of any expansion phase of this project is beyond the scope of this ES. BLM believes Section 3.1.16.5 adequately discusses the impacts on gas supplies of the proposed pipeline abandonment.

Comment #5

These issues have been presented in the FES supplement, Air Quality Impact Assessment of Pipeline Abandonment and Conversion, and in Section 3.1.6.1.2 of the FES.

Comment #6

The data used for this analysis in the DES and FES are based upon the best available data at the time of the study. Section 3.1.16.5 and the Energy Supply/Demand study are believed to adequately address the project impacts on natural gas supplies.

Comment #7

The disposition of Elk Hills oil is not clear at this time. The development and movement of this resource is outside the scope of this project and would require a separate ES.

Comment #8

The description of the corridor through which all new pipeline would be constructed is virtually identical to that described for the proposed project in Chapter 2. Impacts of all-new pipeline construction would be analogous to impacts of new pipeline construction, which have been fully described in Chapter 3. The impacts of abandonment of one set of Southern California and El Paso gas pipelines have been fully described in Chapter 3. Therefore, sufficient data to evaluate the impacts of gas pipeline abandonment and all-new construction are believed to have been presented.

Comment #9

A discussion of the impact of gas supply curtailment has been included in the FES supplement, Air Quality Impact Assessment of Pipeline Abandonment and Conversion, and in Section 3.1.16.1.2. A study of the SoCal pipeline system within California is beyond the scope of this ES.

Comment #10

A mitigating measure has been added to Section 4.2.2 requiring ships utilizing the Pier J facilities to have fully segregated ballast.

Comment #11

See response to Comment 10 above. See also Section 3.1.6.1.2 of the FES.

Comment #12

A section on air quality impacts from operations in coastal waters has been added to Section 3.1.6 of the FES.

Comment #13

Tanker purging operations are ultimately based upon the judgment of the VLCC master and the safe operation of the vessel. However, according to "Supporting Information for the SOHIO Permit Application" submitted to the South Coast Air Quality Management District, except in cases of vessel operating emergencies or for any other safety reason, tanker vessels will not be purged in the Port of Long Beach. At this time enforcement measures have not been committed, and thus occasional impacts from purging are assumed in Chapters 3 and 5 of the FES.

Comment #14

Please refer to the response to Comment 12 above.

Comment #15

Refer to Section 3.1.17 and Appendix A1.1.1.1 of the FES. Purging cannot be accomplished by noninerted tankers. A mitigating measure has been added in Section 4.2.2 to require inerting systems or equivalent on all ships utilizing the new facilities.

Comment #16

BLM believes that the FES is clear as to the proposed purging mitigating measure.

Comment #17

An expansion mode would involve new permits, a new ES, and new impacts. This is stated in various places in this ES. A modification of the project would also require new source review under appropriate rules and guidelines. To avoid any implication that impacts of expansion have been addressed in this ES, references to impacts from an expansion mode have been removed from the FES.

Comment #18

As discussed in Section 3.1.6, under Oil Refining, and in Section 3.1.16.5, under Energy Supply and Demand, it is expected that the project would result in no net change in refinery throughput and no increased emissions.

Comment #19

See response to Comment 18 above. Impacts from electrical generation are discussed in Sections 3.1.6, 3.1.6.1.2, and 3.1.6.2.2.

Comment #20

The analysis in the FES is based on the applicant's proposal to sell 200,000 barrels per day in Los Angeles and ship 500,000 barrels per day eastward. Refer to Section 3.1.16.5, Energy Supply and Demand.

Comment #21

Please refer to the response to Comment 18 above.

Comment #22

Current refining capacity can be partly adapted to use Alaska oil. Questions of cost are outside the scope of the Environmental Statement.

Comment #23

This does not represent obvious environmental benefits and therefore was not treated as an alternative.

Comment #24

Please refer to the response to Comment 18 above. Substitution is addressed in Section 3.1.6.1.2, under Effect of Oil Replacement.

Comment #25

It is not known what amount of the oil reaching the terminal would be from non-SOHIO importers. However, impacts are believed to be adequately discussed for maximum proposed use of the project facilities.

Comment #26

Analysis of oil throughput above the 700,000 bbl/d proposal is considered outside the scope of this project. The Hynes terminal is no longer considered the inland terminal as delineated in Section 1.1.1.1, under Port of Long Beach to Midland (pipeline route).

Comment #27

See response to Comment 25 above.

Comment #28

As addressed in Chapter 1, Section 1.1.1.1, under Port of Long Beach to Midland (pipeline route), Dominguez Hills will be considered as the inland terminal, not Hynes. The larger sized lines are designed to accommodate a possible expansion of throughput from Pier J to Dominguez Hills.

Comment #29

Since Phase 2 was not considered to be within the scope of this project, this subject was not investigated.

Comment #30

This subject was not explored since it was considered to be outside the scope of this project.

Comment #31

Phase 2 is considered outside the scope of this project; no impacts were identified.

Comments #32, 33, 34, and 35

As addressed in Chapter 1, Section 1.1.1.1, the information supplied by the applicant has indicated the initial capacity of the Long Beach terminal would be 700,000 bbl/d with 500,000 bbl/d being transported on to Midland, Texas, from Dominquez Hills. The 200,000 bbl/d difference would be transported from Dominquez Hills to the local refineries.

As stated in Section 1.4.5, Phase 2 would mean increasing the facilities to accommodate 1.2 million bbl/d. No further or ultimate plans have been proposed or discussed by the applicant or the Port of Long Beach.

Comment #36

The relationship of the project to other plans and proposals is discussed in Sections 1.4, 2.1.13, and 3.1.13.

Comment #37

The Environmental Protection Agency and the California Air Resources Board will determine the adequacy of trade-offs in further negotiations during the permitting process. A discussion of trade-offs has been added in Section 4.1.5. Also see Appendix A3.1.6.1 of the FES for an inventory of project emissions; Section 3.1.6.1.2 for calculations of backout; and 2.1.6.5 for the new source review process.

Comment #38

Please refer to the response to Comment 37 above and to the discussion on air quality maintenance planning (Section 2.1.6.5).

Comment #39

Air quality emissions from rock quarrying operations are included in the project emissions inventory in Appendix A3.1.6.1 of the FES.

Comment #40

The conversion of oil to synthetic natural gas has been deleted in the FES as a possible mitigating measure. Many feasible methods for mitigating air quality impacts exist. In the FES, SOHIO's proposed trade-offs and agency requirements have been revised to reflect the most current information and views. See Sections 3.1.6.1, 4.1.5, and 5.6.1.

Comment #41

In general, the best available cost-assessed technology is proposed to be utilized in the construction and operation aspects of the project. Specific mitigating measures are discussed in Chapter 4.

Comment #42

The text of the FES in many places reflects these criteria. See Section 4.2.2.

Comment #43

A mitigating measure to require tankers to have inerting systems and fully segregated ballast has been added in Section 4.2.2 of the FES.

Comment #44

BLM does not agree that this proposal assures lowest emission levels. Excessive energy for pumping would be required.

On motion of Commissioner Brown seconded by Commissioner Wright and all for commissioners voting in favor, the following resolution was adopted by Midland County Commissioners Court, January 10, 1977, and the County Clerk was requested to prepare a Certified Copy for use in the hearings on the Environmental Impact Statement prepared by the Bureau of Land Management for the United States Department of the Interior on the proposed plan of Sohio Transportation Company:

Be it resolved that Midland County, Texas, supports Sohio Transportation Company in its proposal to transport large quantities of Alaskan crude oil from Long Beach, California, by use of existing pipelines in California, Arizona and New Mexico, and by the construction of new connecting pipelines in California and Texas; the terminal point of the pipeline being in Midland County, Texas, East of the City of Midland, Texas;

Be it resolved that Midland County, Texas, is oriented toward the energy industry; is proud of its oil and gas based economy; and welcomes the opportunity to be linked by pipeline and tanker to the fossil fuels of Alaska;

Be it resolved that we know of no adverse effect one more pipeline through our County would have on the environment of Midland County, Texas;

And be it finally resolved that Midland County, Texas, urges the United States Department of the Interior to approve the request of Sohio Transportation Company to transport crude oil by pipeline from Long Beach, California, to Midland County, Texas to provide energy for heating, vehicles, and industry for the United States.

THE STATE OF TEXAS }
COUNTY OF MIDLAND }

I, ROSENELLE CHERRY, County Clerk in and for the County of Midland, State of Texas, do hereby certify that the above and foregoing is a true and correct copy of an ORDER made at a Regular Session of the Commissioners Court on January 10th A.D. 1977, and as recorded in Volume 10, Page 48, Commissioners Court Minutes of Midland County, Texas.

WITNESS my hand and seal of office in Midland, Texas, this the 10th day of January A.D. 1977.

ROSENELLE CHERRY, County Clerk,
MIDLAND COUNTY, TEXAS
By Ro. Wright Deputy

9.17.4 Private Organizations

COMMENTS

DRAFT ENVIRONMENTAL IMPACT STATEMENT:
CRUDE OIL TRANSPORTATION SYSTEM: VALDEZ, ALASKA TO MIDLAND, TEXAS
(As proposed by SOHIO Transportation Company)

Submitted By: Citizens Task Force on SOHIO

Prepared By: Prabhu Nam Singh, Urban Planner
2234 E. Broadway
Long Beach, Calif. 90803
(213) 434-2385

January 4, 1977

PROJECT DESCRIPTION

- Phase II

1 Expansion of the project to 1.2 million barrels/day is reported to be possible by 1980. The proposed system has been designed to facilitate this expansion. It is clear that Phase II is not a long range distant possibility but a decision that may be presented to the public within the next year or two, given the time it takes to plan and build such facilities. Details of Phase II already exist (Harbor Department Draft Environmental Impact Report, Vol. 2 Part 2 Appendix XIII). Phase II should properly be a part of the Environmental Impact Statement and all impacts associated with it fully explored as the establishment of the terminal makes it unlikely that Phase II will turned down.

- Tanker Fleet

2 The EIS reports that the proposed SOHIO fleet will not be adequate to keep the pipeline full, either in the Phase I or expansion phase of the project (p. A-285). It then goes on to hypothesize what the actual fleet might consist of for purposes of determining air pollution. The number and types of tankers is the most critical variable in the air pollution impacts from this project. The make-up of this tanker fleet should be accurately stated in the project description and then carried through the impact analysis.

- Project Capacity

3 No estimate of total daily or annual capacity of terminal is given. If the capacity of the Four Corners Pipeline is 48,000 barrels / day, how will they get the rest of 200,000 barrels / day for Los Angeles consumption out? Will additional pipelines be needed? If so, they should part of this project.

- Tank Farm

4 Explain whether the Dominguez Hills or the Hynes site is the current proposal. If no decision has been reached yet, then both should be discussed in detail.

- Pipeline

5 Mappage throughout the report is totally inadequate. Maps show only the general route of the pipeline and it is not possible to understand the relationship of the pipeline to the land except where the narrative identifies an actual existing right of way. Particularly, this is important in urban areas. If more detail is not available, at least for urban areas, then the environmental impact of the project cannot be fairly determined.

6 The project description should include typical cross-sections showing the right of way, maintenance road, fences, and any other improvements or environmental alterations. Such cross-sections are needed to show typical relationships between the pipeline and all major land uses which will border it, including residential, industrial, recreational, agricultural, and flood control channel. Also, for San Timateo Canyon.

7 The EIS states that the most desirable route for Elk Hills oil appears to be a connection with the SOHIO pipeline at Redlands. The environmental impact associated with this is not explored. This should include the effect of an additional oil surplus in the Los Angeles Basin.

GEOTECHNIC CONSIDERATIONS

8 The EIS should include an extensive analysis of the acceptable level of seismic risk for harbor structures. The EIS should analyze the worst case impacts of a damaging earthquake on the basis of these risk considerations. A worst case analysis should be all tanks full and the dike around the tanks breaking. There should be a thorough analysis of the effects of such a spill on the environment, needed clean-up operations, environmental impacts of clean-up and irretrievable negative impacts. A similar analysis is needed for the tank farm and for the pipeline. Analysis should take into account the numerous other pipelines that exist in the area and the cumulative effect of a seismic episode.

9 The dangers of liquefaction at the terminal site are not adequately considered.

10 The EIS should estimate the potential of a "worst case" tsunami and the impacts of such an occurence. It must identify the level of risk incorporated in the design of the terminal structures. Also, the potential for damage to tankers should be considered as well as the potential for an oil spill and the impacts of such a spill.

AIR

- Existing Conditions

11 Pages 2-259 to 2-287 concerning the interrelationship of Long Beach with regional air quality should be expanded. Long Beach may be the worst coastal location for a new source of hydrocarbons, considering the effects on inland areas.

- Impacts

12 There should be information concerning the effects of pollution on public health, especially the elderly. Include specific medical data relevant to increased concentrations of those pollutants emitted from the project. Relate this to Long Beach's elderly population. Compare respiratory disease rates with other air basins.

13 The assumption that SOHIO crude will back out other crude is unsubstantiated. A reasonable worst case analysis must assume that the same number of other than SOHIO ships will continue to visit Los Angeles and that these will not have the modern pollution control equipment and procedures planned for SOHIO's fleet. Furthermore, the additional oil that would be refined and processed in the Los Angeles Basin would also result in additional air pollution.

14 No impact data is provided on "soot - blowing."

15 The potential for odors from the project could be extremely important considering extensive existing and planned cultural and recreational facilities in the Harbor area and the adjacent downtown. Many of these facilities involve public expenditures. They are part of a continuing effort to reestablish Long Beach as a resort. Any problems with odors can have a negative impact on cultural and recreational projects. Further, odors can affect efforts to revitalize Long Beach's commercial area. This potential problem needs to be analyzed in detail.

16 Also, air pollution in general can have profound negative impacts on property values. Especially in the case of Long Beach where public and private interests are working to re-establish the downtown as a commercial and resort center. While many pollutants will largely impact inland areas, it is understood that significant impacts can also occur locally. Furthermore, the economic impacts of added degradation of regional air quality needs to at least be discussed.

17 With regards to power plant emissions, it is understood that the grid system makes it difficult to estimate where power will come from, it should be possible to estimate the approximate increase in production required at the local Alamitos facility. This facility is one of the largest stationary sources in the basin and significant increases in activity there would add to the concentration of such emissions from Long Beach.

- Mitigation

18 The EIS should refer to and analyze proposed Mitigation measures presented by the Port of Long Beach to the Carter administration transition team (Overview SOHIO - West Coast to Mid-Continent Pipeline Project, Port of Long Beach, December, 1976). This proposal would prohibit ballasting emissions within three nautical miles of the port and prohibit purging within the port except for emergency repairs. Such mitigation would not be effective, as the Los Angeles air shed extends well beyond three nautical miles from the harbor. Furthermore, limitations on purging and ballasting run counter to tanker safety. Maximum tanker safety would require venting of tankers, otherwise dangerous fumes increase the probability of new tanker explosions. According to the EIS (p A-54) even tankers with inerting systems can be hazardous if not adequately vented because in the event of collision and rupture fumes from such tanks can become combustible.

19 There appears to be a serious contradiction between the desire to limit air pollution and to limit hazards due to tanker explosions. If both goals are not possible, then such should be clearly stated.

20 The EIS fails to examine other possible or proposed trade-offs, in particular, the proposed trade-off of ARCO tanks at the Hynes facility (as per the Environmental Impact Report):

21 The assumption that SOHIO crude will "back out" other crude is unsubstantiated. This assumption is contradicted in the Harbor Department's EIR in Vol. 1 Part 1, IX-2. Also, in the Alternatives volume, it is stated that the additional Alaskan oil may be an impetus to increased crude oil demand in the Los Angeles area.

PUBLIC SAFETY

- Potential for Fires

22 Describe the potential for fires at all segments of the site and the worst case extent of such fires. Include a consideration of how such fires could spread to other areas. Also, the vulnerability of the site to fires from other industrial facilities, pipelines, etc. Also, potential fires on tankers, including any added risks by not purging in port. The needed personnel and equipment to adequately respond to such fires, locations from where such capabilities could respond to a project fire, and response times for all sections of the project subject to fire.

23 Describe the potential for fires in the undeveloped areas of the pipeline route. Impacts?

24 What are the potentials for sabotage of the pipeline, potential mitigation, impacts?

25 The recent experience (explosion of the Sansinena) in Los Angeles Harbor should be analyzed in terms of the "worst case" effect such an occurance could have at the SOHIO terminal. Potential negative impacts at the SOHIO terminal would appear to be much worse considering the possibility of other tankers being nearby, the large storage tanks, and the nearness of the Queen Mary. Problems and costs in combatting the recent Los Angeles Harbor fire should be considered including:
- The inadequacy of harbor area foam supplies to combat the fire and the need to bring more in from Los Angeles International Airport.
- Firefighting manpower and equipment requirements, costs, and effects on public safety in other areas
- Vulnerability of commercial areas to looting, due to broken windows, ability of the police to respond, cost, etc.
- Necessity to bring in special oil spill Coast Guard team from San Francisco.

26 Proposed air pollution mitigations need to be analyzed in terms of their effect on fire safety. The Harbor Department has proposed drastically limiting purging within the harbor area. Such would serve to increase the probability of additional major disasters.

- Contingency Plans

27 These are not yet prepared. Because of the potentially immense negative impact oil spills can have on the environment, these need to be described in detail prior to further consideration of this project. This should include:
- plans for off-shore spill (outside of Harbor)
- tanker spills within the Harbor
- tankage spills ,Pier J and Hynes
- pipeline ruptures
  - -on trestle
  - -Pier J
  - -Los Angeles River
  - -urban areas
  - -rural areas
  - -Colorado River

The capability of controlling oil spills is limited by current resources and technology. According to a recent New York Times article (Controls for Large Oil Spills Lag, Dec. 30, 1976), "The Coast Guard's primary arm for responding to major oil spills is formed by three special teams - 20 man units...". The nearest such unit is in San Francisco and it had to be flown in during the recent Sensinena incident, even though this disaster did not represent a major oil spill. There is only one such unit on the West Coast, including Alaska. Its ability to respond to multiple oil spills, and oil spills of truly major proportions should be assessed. In particular, a major earthquake could rupture the tanks on Pier J and probably cause numerous other major spills in the harbor area. The New York Times article goes on to say that the booms used by the special Coast Guard units are not effective in seas of over 5 feet and winds of over 20 knots.

Also, the personnel who will carry out these plans, response times to all segments of the project, the capability of handling worst case spills, the potential (in an earthquake situation) for several spills at once, the need if any for public personnel and equipment.

Also, responsibility for cleanup and liability for spill damage.

27 According to the EIS, approximately 20% of minor oil spills would escape clean-up and a major spill "likely would escape complete booming and clean-up" (Page 5-32, 33). Any proposed contingency plan should be evaluated in terms of its expected effectiveness in cleaning up spills and the damage that would be caused by oil that escapes clean-up.

PLANNED LAND USE

- Long Beach Conservation Element

28 The proposal is in conflict with goal #6, page 9: "To establish a balanced program aimed at improving the qualitative conditions of life for all segments of population of the City".

29 Also, conflict with Water Resource goal #3, page 9.

30 Also, Soils Management Goal #3 "to minimize those activities which will have a critical or detrimental effect on geologically unstable areas..."

31 Also Wildlife Management Goal, page f1 to "protect and preserve distinctive types of wildlife including ...marine organisms..."

- Long Beach Open Space Element

32 The project is in conflict with adopted open space goals:
- page 19, #2 to preserve and enhance open space opportunities offered by the inland waterways of the City through improved access and beautification.
- page 20 #4 to maintain open vistas of the ocean across open lands.
- #7 to preserve areas which serve as natural habitats for fish and wildlife.
- Page 88 calls for aesthetic controls on edges of harbor open space.

- Long Beach Public Safety Element

33 The EIS does not consider the adopted policy that "in terms of industrial growth, the City should strive to attract the least hazardous types of industries". In order to meet this criteria the Harbor Department would have to have attempted to find a less hazardous type of use for Pier J.

- State Coastal Plan

The proposed project is inconsistent with the California State Coastal Plan (1975).

34 Policy #89: Until California's role in National energy needs is defined by national policy, means other than a transcontinental pipeline from California shall be sought to provide other areas of the country with crude. (p.133)

91: Maximum use should be made of existing tanker terminal facilities (this possibility is not adequately addressed in the EIS (page f34)

AMENITIES

The EIS reports that chronic small spills will occur frequently during normal operations and that these will require closures of portions of the Long Beach beach from time to time. Also, beach goers will experience problems with tar, in general (P. 3-324, 325). It is reported that approximately 20% of chronic small spills will escape clean-up and will probably end up on Long Beach beaches. Also, sport fishing populations are expected to decrease 50 - 80% because of the project (EIS p 3-182).

35 The EIS contains no evaluation of existing waterfront recreational usage, i.e. tourists, local residents. Also, the effects of harbor development on long term environmental degradation and long term decline of Long Beach as a resort city, including degradation of water quality, surf and ocean views. Recreational use of these beaches is already low among more mobile segments of the local population who can afford to travel to less degraded beaches. Two of the principal users of Long Beach's waterfront do not have this choice - low income elderly and low income youth. Both of these groups will probably continue to use the beach as they have in the past, in spite of increased tar, increased water pollution and decreased sport fish populations.

35 Other choices for these population groups are limited by their lack of mobility. Among other segments of the local population, use of the Long Beach beach will decrease even further, causing further increases in traffic and congestion along other less degraded beaches (i.e. in Orange County).

NAVIGATION

The proposed project significantly changes the configuration of the port and will also add significantly more ships of a significantly larger size.

36 The EIS does not discuss the particulars of the project's impact on navigation in the harbor. There should be a complete analysis. It should include the following considerations:

1) A dangerous navigational situation may exist as a result of the limited space remaining between the proposed rock breakwater and the outer harbor breakwater. There will be a gap of only 2000 feet to navigate through. This gap will become a major channel between the Eastern anchorage used by ships waiting to berth in Los Angeles and Long Beach harbors. During those periods that fog makes navigation hazardous, this narrow channel can make the SOHIO terminal very vulnerable to accidents and in turn, oil spills.

37 2) In light of the remaining projects proposed by the General Plan, Port of Long Beach, the port may become a difficult navigational area, especially for ships of the magnitude being used by SOHIO. These projects include the western fill to be used as additional pier space and the marina to be used by 1700 recreational boats. The impact of these additional projects have not been examined by the EIR.

38 3) The required 55 feet of water limits the uses of the port as a safe port in storm conditions. Where weather conditions prevent maneuvering alongside a pier, the ships would be kept from entering the port to secure the safety of the outer breakwater. This can set the stage for serious accidents.

MITIGATING MEASURES

39 An energy mitigation would be the use of solar power, especially for desert pump stations. This should be discussed in relation to the Coastal Commission procedure of requiring solar energy even for swimming pools.

CUMULATIVE IMPACTS

The project will create a surplus of oil on the West Coast, while the project sponsors claim the East and Midwest will be facing serious oil shortages. This situation will create a very positive attraction for petro-chemical industries. Expanding companies will look very carefully at the Los Angeles petro-chemical complex and companies from other parts of the country may even be attracted to relocate here. Currently there is a proposal from DOW Chemical to build a plastics plant in the Bay Area, the principle reason for which is the expected availability of Alaskan oil.

Refineries and petro-chemicals in general are major sources of air pollution. Not only that, when concentrated as they are in the Harbor - Wilmington - Torrance area they create cumulative negative effects on the surrounding environment. Long range effects of encouraging this complex to expand include decline in property values and home maintenance, and continued out-migration of middle class and desirable light industry to cleaner suburbs.

As expressed in the Harbor Dept. EIR, one of the major rationales for locating the project in the Los Angeles Basin is that the area is already environmentally degraded. If this decision is allowed to be made it may set a very significant consequence leading to the continued degradation of the Los Angeles Basin.

The creation of a surplus of crude oil in the Los Angeles area will make it less likely for the Federal government to allocate as much natural gas to this area as they would otherwise.

The surplus will also lessen the pressure to develop alternative forms of energy and conservation methods, which are clearly responsive to expected declines in long term supplies.

The project will create cumulative negative impacts on public health, particularly on the most sensitive segments of the population - children and senior citizens.

The continued conversion of open space water areas to heavy industry furthers environmental degradation in Long Beach and works counter to the city's efforts to re-establish heavy use of the waterfront and to re-establish itself as a major resort center. The project will also have a similar cumulative negative effect on harbor area aesthetics.

Approval of the project would continue the lack of meaningful planning in the Los Angeles Basin, which is responsible for the degradation of the natural environment. There is only one bay, yet it is divided into two "Ports". Instead of coordinating their efforts through planning and thereby striving to minimize negative impacts, the two harbor jurisdictions compete for potential expansion. The petro-chemical complex extends over 5 jurisdictions with no planning or public knowledge (as far as we can determine) about its present size, industrial mix, its future, and its long term environmental impact.

Within Long Beach itself, the Harbor Commission operates almost as a separate municipality. Its only functional criterion for development is economic expansion, and as the commissioners are not elected, there is no mechanism to effectively keep them sensitive to other goals. Thus, one part of Long Beach's shoreline is being targeted for major tourist facilities while very close by a plan for a major heavy industrial use and source of pollution is being considered without any formal review by elected representatives (i.e. the City Council of Long Beach).

40 What is the cumulative effect of all of the proposed pier filling - not just this one - on the harbor?

41 Will dredging cause erosion of the sandy beach? Will it require continual re-dredging of the channel for deep draft ships to keep it open (a possible long term and cumulative impact)?

42 There should be a discussion of the cumulative impact of attracting more ORV's to the desert.

GROWTH INDUCING IMPACTS

43 The EIS states: "Regardless of whether the proposed SOHIO project is implemented, consumption trends of petroleum products along the pipeline route would not be expected to change. The proposal is a transportation system and as such would not be expected to be a source of additional petroleum products west of Midland"(p. 2-1058). The EIS goes on to state that "no increase in capacity of Los Angeles Basin refineries beyond the projected 1977 installed capacity is believed to be possible in a projection to the year 2000 because of the serious air quality problems which already exist in the basin" (p. 2-1063).

43 The EIS reproduces the October 8, 1976 New Source Review Rules by the Southern California Air Pollution Control District. It is not at all clear from these rules that major new stationary sources of air pollution would be prohibited from the Los Angeles Basin. These rules contain numerous exceptions and exemptions and are by no means ironclad. In particular, reviews to date of the SOHIO project show that the concept of trade-offs as allowed by these rules has not been firmly established as a practical formula. Furthermore, the trade-off concept may be in conflict with the Federal Clean Air Act. Also, SCAPCD rules allow exceptions for projects that will utilize "innovative" air pollution control systems. Any new refinery proposed for Southern California will in all probability include numerous pollution control innovations.

The cavalier treatment of growth inducing impacts by the EIS is in contrast to the emphasis placed on this subject in the Request for Proposal issued by the United States Department of the Interior to prospective EIS consultants (March 16, 1976):

"Growth Impacts Associated with Port Facility: Estimate population, employment and income growth associated with the proposed Long Beach port facility. This effort will include an evaluation of additional local refining capacity needed and available. It will also include an evaluation of potential for petrochemical industry growth in the Los Angeles area that could be generated by the port facility" (p. 26).

The Harbor Department states, "Without the petroleum from the proposed project it is likely that the present rate of growth in fuel consumption will not be maintained." (Vol. I Part I, IX-2) If this is true, then we believe it must follow that without the project there will be increased efforts for conservation and to develop alternate energy sources. The EIR also claims in this section that it cannot be determined whether project related oil will be used by new or present users (Vol. I Part I, IX-2). This contradicts other claims that the project oil will "back out" foreign oil.

The project is not the Alaskan oil, it is to greatly increase the potential of the Los Angeles Basin to receive large supplies of this oil. This increase in terminals, storage tanks, etc. can be expected to attract new users such as new refineries and petro-chemical plants, in the same way a new highway generally attracts new development. As stated in the Energy Volume of the Harbor Department EIR, Page II-14, "Petrochemical industry could begin to flourish in the area." Also the Alternatives Volume of that report points out that new refineries tend to locate where they have good access to both raw materials and markets (p. II-6). Also, in that volume is the statement that "regulatory approval of a trans-shipment project would serve as a precedent indicating a permissive policy toward petroleum activity at that location." (II-7) In other words, the argument that additional petrochemicals, etc. could not locate in Los Angeles because of air pollution regulations is weak.

Citizens Task Force on SOHIO
January 4, 1977

The potential for additional petrochemicals in the harbor area is critical to Long Beach and the entire basin. Concentrations of such industry have traditionally caused the out-migration of light industry and the middle class to environmentally cleaner areas. They are heavy contributors to air pollution, and public safety hazards. The highest concentration of such industries in the United States is currently in the State of New Jersey. This has been correlated with the fact that New Jersey also has the highest rate of cancer in the United States. Anything to encourage a larger concentration of such uses in a "closed" air basin such as Los Angeles is contrary to the public interest. Furthermore, such industries have overall negative economic effects on already developed areas insofar as they are incompatible with existing land uses.

ALTERNATIVES

44 The EIS states "It is unlikely that a decision not to produce Alaskan crude would be made at this time because of possible shortages and stated national goals. Such a step would almost certainly require federal financial allocations for companies deeply committed financially to the development and marketing of Prudhoe Bay crude oil." (p. 8-13) The EIS fails to mention the fact that the Alaskan pipeline was approved and built on the mistaken premise of private oil companies that the oil would be needed on the West Coast. The resulting problem that now exists is a marketing problem of a private company. The public has no commitment to helping this company find the cheapest way to market its product, which is essentially what the EIS seems to be assuming. The distinction between public and private concerns must be clarified by the EIS. The oil companies are not public, nor are they public utilities. Their products are vital to the national interest, but it does not follow that the public interest must become involved in marketing problems caused by the companies' own errors in judgment. The pipeline exists and should it for any reason not be used to full capacity, its full capacity would be available to help alleviate any oil shortages or emergencies.

45 Discussions of air quality make no consideration of the population of alternative air sheds. Air pollution is primarily a problem to human health, although it does affect flora and fauna. The impact of air pollution must be"weighted" according to how many people will have to breathe the degraded air. Furthermore, public health problems associated with air pollution do not necessarily increase arithmetically with increased pollution. The EIS needs to discuss public health thresholds beyond which air pollution severely limits activities and health.

-12-

RESPONSE

Comment #1

A conversion of a second gas pipeline would require an additional complete environmental analysis and is considered outside the scope of this project.

Comment #2

As stated in Section 1.1.1.1, under Sea Leg, a mix of 14 tankers was used for analyses in other chapters.

Comment #3

The 16-inch Four Corners pipeline has sufficient capacity to handle the additional 200,000 bbl/d for distribution to local refineries by increasing the pressure of the line.

Comment #4

As described in Section 1.0, Dominquez Hills has been chosen as the inland terminal.

Comment #5

Since most of the proposed pipeline involves either conversion of existing natural gas lines or construction within existing utility rights-of-way and much of the environmental data cannot be mapped in greater detail, the maps are believed to be adequate.

Comment #6

Typical cross sections and sketches of aboveground facilities are found in Chapter 1. Cross sections showing the relationship of the pipeline to all major adjacent land uses were considered unnecessary.

Comment #7

The production of Elk Hills oil and related construction activities is considered outside the scope of this project.

Comment #8

Special studies and analyses of seismic risk for the pipelines and tank farms are presented in the reference: Holmes and Narver, 1976. The discussion of impacts related to seismic hazards is believed to be adequate.

Comment #9

Liquefaction in the port and terminal area is believed to be adequately treated in Section 2.1.3.3, Geological Hazards, and in Section 3.1.3.3, under Secondary Ground Failures.

Comment #10

Damage to the project by tsunamis is not considered to be a serious threat. Past tsunami occurrences and levels of impact are described in Section 2.1.3.3.

Comment #11

Section 2.1.6.2 on the Los Angeles Air Shed description has been revised to reflect this comment.

Comment #12

Health effects are the underlying basis for Federal primary air quality standards. BLM did not assess health impacts because their quantification involves controversial statistical conclusions. To clarify this point, the discussions of air quality standards (Section 2.1.6.5) and impacts due to air pollution (Section 3.1.6) have been expanded. The populations likely to be subjected to emissions from alternative sites are compared to the applicant's proposal in Chapter 8 of the FES.

Comment #13

BLM finds sufficient evidence to indicate that some crude oil will be backed out. The principal benefit would be on air quality. Quantification is currently imprecise. See Section 4.1.5 in the FES for a discussion of back out. Additional refining is determined by growth and market conditions, not by size of the surplus or by pipeline throughput capabilities, and consequently is beyond the scope of the project.

Comment #14

No discussion of soot-blowing was presented because existing regulations prohibit soot-blowing in port except in an emergency.

Comment #15

Insignificant odor impacts from the project are expected. Since this question naturally arises, the subject has been addressed in the FES in Section 3.1.6.1.2, under Odors.

Comment #16

Refer to the response to Comment 12 above.

Comment #17

For discussions of electrical power generation, refer to Sections 3.1.6.1.2 and 3.1.6.2.2, under Emissions From Electrical Power Generation.

Comment #18

Chapter 4, Mitigating Measures, has been substantially revised and expanded, including discussions of committed and proposed tanker operation measures. Appendix A1.1.1.1 has been expanded to include discussions of tanker equipment and operations.

Comment #19

In light of the additional committed mitigating measures included in Section 4.2.2 regarding segregated ballast and inerting systems, no contradiction between the desire to limit air pollution and to limit tanker hazards is anticipated.

Comment #20

The Environmental Protection Agency or the California Air Resources Board will determine the adequacy of trade-offs in negotiations during the subsequent permitting process. Discussions of several trade-offs have been added to Section 4.1.5 of the FES.

Comment #21

Please refer to the responses to Comments 13 above and 43 below.

Comments #22 and #23

The potential for fires along the pipeline route is very low and no impacts are anticipated. The impacts of potential fires are discussed in Section 3.1.17.

Comment #24

The potential and impacts of sabotage have been added in Section 3.1.17.

Comment #25

Section 3.1.17 has been expanded to reflect tanker explosions.

Comment #26

Chapter 4 has been revised to discuss the effectiveness of mitigating measures. Also, Section 3.1.17 has been expanded to discuss fire hazards and explosions.

Comment #27

The impacts discussed in Chapter 5 take into account general procedures of accepted oil spill contingency plans rather than an evaluation of this specific plan. The oil spill contingency plan is available as referenced in the Table of Contents in Chapter 1.

Comments #28 through #33

The Port of Long Beach master plan, not the City of Long Beach general plan, governs development of the Port of Long Beach and applies where conflicts in various city plans occur. Section 2.1.13.1, Sea Leg and Port of Long Beach, and 3.1.13.1, Coastal, Sea Leg and Port, have been changed to clarify this point.

Comment #34

Interpretation of the California Coastal Plan Policy is the responsibility of the California Coastal Commission and is viewed as a political question not within the scope of this Federal ES.

Comment #35

The recreational environment of Long Beach is described in Section 2.1.12.3 under San Pedro Bay and Los Angeles County. Impacts on recreation resources in Long Beach are described in Section 3.1.12.3, Southern California Coast and Port of Long Beach, and mitigating measures to minimize these impacts are contained in Section 4.2.2, Port of Long Beach and Terminal Areas.

Comment #36

The distance from the proposed breakwater and the existing outer harbor breakwater is at least 3,000 feet, which is considered quite adequate for safe navigation. No text change was believed necessary.

Comment #37

Only projects that are directly related to and necessary for implementation of the SOHIO proposal are analyzed in the ES. Thus, projects such as the proposed marina and pier are outside the scope of the ES.

Comment #38

The depth of the port area for the SOHIO tankers has been increased to 62 feet. See Section 1.2.2.1, under Dredging.

Comment #39

Information relative to solar power as a feasible alternative for the pump stations is very limited and no technology for generating the needed quantity of power has been demonstrated.

Comment #40

Cumulative effects of harbor construction for the year 2000 are discussed only in relation to the effects of the construction for the SOHIO project in the appropriate sections in Chapter 3.

Comment #41

There will be no effect on the sandy beach (see Section 3.1.5.1.2, under Circulation Patterns). Impacts associated with possible maintenance dredging requirements are presented in Section 3.1.8.1.1, under Dredging and Filling Activities.

Comment #42

Impacts of the proposal facilitating ORV access are discussed in Section 3.1.12.3, under California Desert.

Comment #43

As proposed, this project would not increase crude oil imports to Los Angeles but would replace foreign crude oil. This is discussed in Section 3.1.16.5. Refer to the discussion of EPA interpretive rulings in Section 2.1.6.5 for the relationship between emissions growth and maintenance of air quality. No further text changes were believed to be warranted.

Comment #44

The reference to possible shortages and national goals has been deleted in Section 8.1.1.

Comment #45

Refer to the response to Comment 12 above. Discussions of alternatives to the project in Chapter 8 of the FES take socioeconomic factors, such as numbers of persons impacted, into account.

ENVIRONMENTAL CLEARINGHOUSE

618 North Central
Phoenix, Arizona 85004

252-3811

24 January 1977

Charles R. Tulloss, Project Manager
U. S. Bureau of Land Management
Post Office Box 600
Los Alamitos, California 90720

Dear Mr. Tulloss:

I wish to make the following comments concerning the DEIS Crude Oil Transportation System as proposed by Sohio Transportation Company.

(1) The twenty pumping units would be powered by overhead transmission lines connected to a transformer substation at each site. The utilities serving each area would provide this power. (Reference Chapter 1:1-96, Chapter 2:2-891) The report states that these new transmission lines would slightly modify land use in certain sections.

1 This part of the DEIS should be much more detailed. These lines would pass very close to the Kofa wildlife refuge and thus they
2 have the potential of disturbing the habitat. Secondly, these lines could have extremely adverse effects on the scenic quality of our desert landscape.

3 In sum, the information concerning power line construction is scanty and incomplete in terms of location, noise which would be subtle but audible, and detraction from scenic areas.

(2) This draft EIS, as others, does not include a section on the
4 possibility of terrorism and sabotage. With oil we are dealing with an increasingly valuable natural resource in addition to a tremendous potential--and often all too real--polluter.

continued next page

Let me explain my position more fully. In Chapter 2:2-893, the importance of commercial fishing to the economies of the Pacific Coast states is described. What we find is that fisheries constitute an old and extremely valuable source of income in these areas. The possibility of an accidental oil spill is discussed (Chapter 3:3-52) but never a word about the security precautions to be taken at loading, shipping, or unloading stations to avoid possible terrorist activity that might damage these economies purposely. Might it not be possible for a small and committed band of people to fire storage tanks or take control of a tanker and threaten to discharge oil into coastal waters where fish are the most plentiful unless their demands are acceded to? Not only is there danger to commercial fisheries but also to wildlife habitat such as the Farallon Wildlife Refuge.

(3) Under alternatives, Chapter 8:8-1, probably the most obvious
5 alternative--that of a trans-Canada pipeline--is given little attention.

The Kitimat, B.C. (Chapter 8:8-4) alternative is very appealing because it is shorter in length than other alternatives including the one which is the subject of this DEIS. It would also parallel existing utility rights-of-way thereby lessening adverse environmental impacts. Now surely if an arrangement such as ARAMCO can be successfully made in Arabia, a nation of <u>totally</u> "differing political and regulative factors", then surely some further consideration should be given to a Canadian-American pipeline venture, even if the Kitimat alternative is not ideal.

This concludes my comments on the Sohio DEIS. I hope you will consider them in preparing the final Environmental Impact Statement.

In all sincerity,

Marsha Cosentino
Environmental Clearinghouse

RESPONSE

Comments 1, 2 and 3

Because of a lack of precise information on the location of proposed power-line rights-of-way, these ancillary facilities will require supplemental environmental analyses when formal applications from public utility companies are made. The environmental analysis reports prepared by the BLM will include scenic, wildlife, noise, and other impacts, and will consider alternative alignments to minimize impacts. The need for this further analysis has been added to the FES in Section 1.2.3.2, under Transmission Lines, and 3.0, Summary of Impacts.

Comment #4

A discussion of terrorism and sabotage has been added to Section 3.1.17.

Comment #5

The discussion of the Kitimat alternative has been revised and expanded in Section 8.2.1 of the FES.

National Wildlife Federation

1412 16TH ST., N.W., WASHINGTON, D.C. 20036 Phone 202—797-6800

January 24, 1977

The Honorable Cecil D. Andrus
Secretary
Department of Interior
Washington, D.C. 20240

Dear Mr. Secretary:

Recent studies have indicated a potential environmental problem not fully considered in the draft environmental impact statement entitled, "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas, (as proposed by the SOHIO Transportation Company)." There are two aspects of the SOHIO proposal for the Trans-Alaska Pipeline System (TAPS) on which we wish to comment.

The first item involves the 425-square-mile Columbia Glacier, which may pose a threat to the supertankers that will soon be entering the nearby port of Valdez. Scientists of the U.S. Geological Survey have repeatedly warned that the glacier could be on the verge of a drastic retreat that would discharge numerous icebergs into Prince William Sound. They have requested funds for a study to research accurately the extent of retreat of this glacier and the consequent introduction of masses of ice by calving into the Sound. One USGS glaciologist estimated that the glacier could discharge a cubic mile of ice per year into the Sound as icebergs for the next 30 to 50 years. These icebergs could seriously endanger tanker navigation. The threat to safe navigation in the Sound is heightened by the strong currents, winds, and often heavy patches of fog occurring in the area.

More importantly, the accelerated retreat of the Columbia Glacier might result in the complete blocking of all shipping lanes into the port of Valdez. This would be a particularly serious situation because the storage capacity at Valdez consists of only 15 tanks, each holding 510,000 barrels. This is sufficient for approximately 7-8 days, based on a 2 million barrel-per-day delivery rate. In the event of tanker incapacity for a long period of time, perhaps more than a week, the entire pipeline operation would cease. Further, nearly 7 days are needed in order to stop and re-start the transport of oil through the pipeline. The difficulty and expense of stopping and starting pipeline operation may tempt shippers to continue transporting oil under marginal or even treacherous conditions for tankers.

According to the final environmental impact statement on TAPS, the port of Valdez was selected as a terminal because it offers "year round operation at an ice-free port, very deep waters, easy accessibility, and ample maneuvering room." As Valdez begins to operate as the southern terminal of the

National Wildlife Federation

Hon. Cecil D. Andrus January 24, 1977

-2-

Trans-Alaska pipeline, use of the shipping routes into the Port will increase considerably. This intensifies the potential threat to tanker navigation presented by a retreat of the Columbia Glacier. We believe that the draft environmental statement on the SOHIO proposal should address these problems and invite discussion thereon. In addition, it would be appropriate to list what studies dealing with these issues are under way at present. Any alternative port locations or methods of handling the iceberg threat should also be more fully examined.

1 The draft environmental impact statement is deficient in these areas. In view of the possibility that severe calving of the Columbia Glacier could incapacitate or sink tankers entering or leaving Valdez with consequent oil spillage, the failure of the draft statement to consider these problems renders it inadequate.

Sincerely,

THOMAS L. KIMBALL
Executive Vice President

cc: G. R. Arnett, NWF Pres.
P. W. Schneider, NWF Reg. Exec.
C. N. Crouse, NWF Reg. Dir.
U. C. Nelson, Alaska Wildlife Fed.

RESPONSE

Comment #1

The hazards of icebergs discussion has been expanded in the Tanker Traffic Study in Appendix A1.1.1.1-A of the FES, and discussion has been added to Section 3.1.5.1.2 of the FES.

January 24, 1977

SIERRA CLUB 530 Bush Street San Francisco, California 94108 (415) 981-8634

SOUTHERN CALIFORNIA REGIONAL CONSERVATION COMMITTEE

Project Manager
Bureau of Land Management
P. O. Box 660
Los Alamitos, CA 90720

Re: Proposed Crude Oil Transportation System: Valdez, Alaska to Midland, Texas.

The following comments on the Draft Environmental Impact Statement supplement my earlier testimony of January 4, which was concerned primarily with the Project in the vicinity of Long Beach.

Two aspects of the Project are not adequately covered in the DEIS, and both appear to have the potential for serious environmental impact. The first is the tanker routing and control from port to port; the second is air quality impact at the Valdez terminus or at other points where large quantities of hydrocarbon vapors may be released.

1 The problem of routing and composition of the tanker fleet, and the controls on navigation and tanker construction, should be thoroughly analyzed and presented within the DEIS so that problems of safety aboard ship and damaging oil spills or hydrocarbon vapor emissions can be kept to an acceptable minimum.

2 The considerations of air quality at the Valdez terminus has been completely omitted from this DEIS although the major hydrocarbon emissions are likely to occur during loading operations. Consideration of these emissions and their mitigation sould be an integral component of the DEIS on this Project. We understand that air quality analysis had been prepared at some considerable expense, but then omitted. This appears have resulted in not only in waste of effort, but also in a gross inadequacy in the DEIS which should be corrected in the final Environmental Impact Statement.

C. Freeman Allen

C. Freeman Allen
394 Blaisdell Dr.
Claremont, CA 91711

RESPONSE

Comment #1

The Tanker Traffic Study has been expanded and is presented as Appendix A1.1.1.1-A of the FES. Additional information has also been added on tanker operations and safety in Appendix A1.1.1.1 and Section 3.1.17 of the FES. Additional tanker-equipment mitigating measures have been added to Section 4.2.2.

Comment #2

Additional discussion of potential air quality impacts at Valdez has been included in Section 3.1.6, under Port Valdez. The full gamut of the Alaskan study was not incorporated in the FES because potential impacts pertain to the entire Alaska North Slope oil trade and are expected to arise whether or not the proposed project is approved. The Valdez Air Quality Study is available, as referenced in the Table of Contents for Chapter 1, but does not clearly define incremental impacts from the proposed project.

4725 N. 70th St.
Scottsdale, Arizona 85251
January 11, 1977

Project Manager
Bureau of Land Management
PO Box 660
Los Alamitos, California 90720

Dear Sir:

This letter is written on behalf of the Arizona Wilderness Study Committee, a new group dedicated to preserving our state's wilderness areas and scenic resources.

Because the SOHIO proposal involves a minimum of new construction, and most of that in areas that have already been disturbed, we have no major objections to it. However, we do feel that two of the proposed pumping stations are poorly located and should be moved to alternative sites.

1 The Livingston pump station would be located on the northwestern boundary of the Kofa Game Range, directly along the access road to the Crystal Hills Campground. Besides disrupting views of the Kofas from Highway 95 and intruding on the feeling of wildness and solitude along the Crystal Hills road, the pump station would be located in an area which conservationists have proposed as an addition to the Game Range. A map is enclosed showing this and other proposed additions, which were endorsed in 1974 by such groups as the Sierra Club, Wilderness Society, Friends of the Earth, Arizona Conservation Council, and Southern Arizona Hiking Club. The Livingston pump station should be moved a few miles west, to the opposite side of Highway 95, so as to reduce its visual impact on the Kofas and retain the area just outside its boundaries as a potential addition the Game Range.

2 We also feel that the Black Mountain pump station, northwest of San Manuel, would badly disrupt open-space and scenic values in this area. We urge that the station be moved approximately thirteen miles to the east in order to make use of existing facilities near San Manuel.

Thank you for this opportunity to present our views.

Sincerely,

Tom Wright

Tom Wright, Chairman
Arizona Wilderness Study Comm.

RESPONSE

Comment #1

Alternative locations and other mitigating measures were reexamined for the Livingston Pump Station. A new discussion of mitigation for this pump station has been added to Section 4.2.4.

Comment #2

While the Draft ES proposes a mitigating measure to relocate the Black Mountain Pump Station eastward 13 miles, this now does not appear to be feasible in terms of pipeline hydraulics because of the increase in elevation.

ARIZONA DESERT BIGHORN SHEEP SOCIETY INC.

P. O. Box 5241 Phoenix, Arizona 85010

January 23,1977

Mr. Charles R. Tulloss,Project Manager
Bureau of Land Management
SOHIO EIS Project
P.O. Box 660
Los Alamitos, Ca. 90720

Dear Mr. Tulloss:

An evaluation of the EIS for a crude oil pipeline proposed by the SOHIO Corp. was made and the following comments are made in regards to that portion within the State of Arizona.

In several places comments are made concerning the sensitivity of the desert bighorn sheep habitat in the Dome Rock Mtns., as well as the critical location of a sheep watering facility immediately adjacent to the pipeline corridor; pages 3-240,3-249 and 3-269.

On page 4-32, as a mitigation, it is proposed to eliminate the powerline thru the Copperbottom Basin that would have serviced the Ehrenberg pump station. The Sheep Society concurrs in this mitigation.

1 It is felt that additional mitigations are needed for the Dome Rock Mtns. The applicant should construct at least two or more sheep watering facilities in the Dome Rock Mtns to preclude the possibility the one now in existance near the pipeline corridor be irrevocably and irretrivially removed from sheep usuage by any act of man.

The pipeline will cross the Kofa Game Range, the only dedicated game refuge in its entire length and an area unique only to the state of Arizona. This refuge was set aside to preserve sheep habitat and bighorn sheep for the general populace of the United States.

2 The EIS does not adequately discuss the reason for additional construction, although from most recent information it appears carrying capacity is either totally lacking or insufficient for projected usuage. Also lacking is the past history of the Kofa Game Range and the reason for setting aside this land as a wildlife refuge. It is felt this information should have been included in the EIS for consideration of the total impact on the game range

3 On page 4-37 as a mitigation for impacts on the game range, two improved cattle guards are to be built. This is not a mitigation because the cattle guards now existing will be removed as a consequence of the new construction and will have to be replaced.

ARIZONA DESERT BIGHORN SHEEP SOCIETY INC.

P. O. Box 5241 Phoenix, Arizona 85010

Page 2 Mr. Charles R. Tulloss

4 The applicant to properly mitigate the land to be included in the expanded pipeline corridor should be required to replace in kind a like amount of land. Such land is presently available in the form of private inholdings, grazing allottments and mineral claims within the confines of the Kofa Game Range. In addition,the applicant can undertake improvement work on charcos in the immediate vicinity of the pipeline corridor and such other habitat improvements as may be deemed necessary to mitigate for the disturbance of the construction activities on the Kofa Game Range.

5 The final EIS should devote greater emphasis to impacts in the Dome Rock Mtns and the Kofa Game Range and in particular the impacts that will occrue to sheep management in these areas.

Sincerely

John Krausa
President

Harley Young Jr

By Harley Young Jr.
Legislative Chairman

ARIZONA DESERT BIGHORN SHEEP SOCIETY INC.

P. O. Box 5241 Phoenix, Arizona 85010

Feb 8, 1977

Dear Mr Tulloss

On the afternoon of the 23rd I went duck hunting. I forgot to stop at the Post office and carried several items of correspondence and bills to be paid with me. On the way home that evening I dropped what I thought was the whole lot into the mail box.
This evening while cleaning out my 4WD I found the and a telephone bill under the seat.
I hope this mishap will not prevent our comments from being entered into the record.

Sincerely
Harley Young Jr

THE ARIZONA DESERT BIGHORN SHEEP SOCIETY, INC.

RESPONSE

Comment #1

The watering trough is more than 100 yards upslope from the right-of-way; therefore, no impacts to the trough are anticipated.

Comment #2

The 34.2-mile segment east of Livingston, which crosses a portion of the Kofa Game Range, requires new construction because there is not a 30-inch line available that could be utilized by this project. Since there is an existing right-of-way through the Kofa Game Range, and all construction would be within this right-of-way, the proposed project would have little bearing on the purpose for the establishment of the Kofa Game Range.

Comment #3

The text was revised by removing this statement from the mitigation section.

Comment #4

The U.S. Fish and Wildlife Service is working with the applicant on mitigating measures for the Kofa Game Range.

Comment #5

Comment was noted but no text change was believed to be necessary.

TUCSON AUDUBON SOCIETY

~~P.O. BOX 3801~~ TUCSON, ARIZONA ~~85717~~

6712 Harran Place
Tucson, AZ 85704
19 January 1977

Project Manager
Bureau of Land Management
P.O. Box 660
Los Alamitos, CA 90720

Gentlemen,

In our original letter we made no objections to the transmission pipeline but only asked that all safety precautions to prevent spills and harrassment of wildlife be seriously considered. However after detailed review of the 8 volume Draft Environmental Impact Statement, we are constrained to seriously question if the El Paso Natural Gas pipeline should be used for the transmission of crude oil. Detailed review of the draft E.I.S. inter-alia discloses:

1. Crude oil spills all along the line are to be expected and will be considered more or less as routine and incidental to this type of operation.
2. Pumping stations will be noisy and subject to periodic breakdowns. Noise levels will be to a considerable extent an element in harrassing wildlife.
3. Power transmission lines to pump stations will be objectionable from an aesthetic viewpoint, will disturb wildlife and in some cases eradicate both vegetation and wildlife.
4. Many additional cross-country roads will be made that will attract OFF-ROAD vehicles and will as a result further desecrate public lands, thereby adding substantially to harrassment of wildlife.
5. The El Paso natural gas pipeline was not designed nor engineered for transmission of heavy crude oil. The line in question was designed and installed for transmission of essentially weightless natural gas under pressure and not for heavy crude oil which requires additional stressing for weight as well as pressure. E.I.S. states line will be fully hydrotested, but nowhere is
1 there any mention under what pressure the crude oil will be pumped, and what safety margin will be maintained within the hydro-test limits.
6. The El Paso natural gas pipeline has been in use for a considerable number of years during which it has been subjected to various stresses, and therefore might fail under stress of weight and pressure due to metal fatigue that may not have manifested itself during hydro-testing.
7. Many areas particularly in southern California that are traversed by the El Paso pipeline replete with geological faults which will make transmission of heavy crude oil under high pressure extremely hazardous. Other areas traversed by the El Paso pipeline are subject to liquefaction. Moreover the gas line was installed under ground and above ground for carrying essentially weightless natural gas under pressure, therefore the entire length of the El Paso pipeline must be considered suspect in it's ability to withstand transmission of heavy crude oil under pressure.
8. It must be mentioned here that in order to make the project commercially profitable the crude oil will have to be pumped at the outer limits of the allowable pressure, thereby subjecting the pipeline to very high risks.

conservation education recreation

El Paso - BLM
19 January 1977
Page 2

Since the air pollution in the Los Angeles - Long Beach air shed already exceeds E.P.A allowable limits, it is very questionable that the city of Long Beach would allow the construction of a tank farm and the continual unloading of crude oil from several tankers simultaneously. A considerable pollution escapes into the atmosphere while unloading, filling ballast tanks and continually from tank farm storage. To unload at some other point along the California coast would be equally objectionable because of it's harmful effects on fish and wildlife. Since the recent oil disaster in the Santa Barbara channel, it is doubtful if southern California residents would tolerate the unloading of crude oil any where along the southern California shores.

The selection of the now unused El Paso Natural Gas pipeline appears to be a
2 matter of economics rather than of sound engineering principles. Other avenues of approach have been mentioned but have been more or less summarily dismissed as not
3 worthy of serious consideration. A full length overland route through Canada may warrant detailed study. The use of railroads may also merit assessment in depth, since at least one railroad has expressed such undertaking to be within it's existing capability.

In closing we wish to go on record that we feel the use of the El Paso Natural Gas pipeline for transmission of heavy crude oil over hazardous terrain was ill choosen and should be completely re-evaluated.

Sincerely,

Virginia F. Cockrunek
Conservation Chairman, Tucson Audubon Society

RESPONSE

Comment #1

When the design has been completed and the testing and stress analysis is finished, the design pressures will then be established. Preliminary design has indicated the operating pressure will be approximately 700 psi.

Comment #2

The Trans-Canada alternative was analyzed in the Trans-Alaska Pipeline System EIS and considered in the decision to use the route to Valdez. BLM does not believe another analysis is required.

Comment #3

The discussion of the alternative of shipment by rail has been expanded in Section 8.3.1 of the FES.

CARPINTERIA VALLEY ASSOCIATION
387 LAMBERT ROAD · CARPINTERIA, CALIFORNIA 93013

December 30, 1976

Re: CA-972

Charles R. Tulloss
Project Manager
Bureau of Land Management
SOHIO EIS Project
P.O. Box 660
Los Alamitos, Ca.. 90720

Dear Mr. Tulloss:

We find that the draft EIS does not address itself adequately to our immediate concern -- that of the proposed SOHIO oil tanker transportation route through the Santa Barbara Channel, and the various impacts this would have on the area.

1) The Channel is only 22 miles wide at its widest point, bounded by the mainland and the Channel Islands. Any tanker spill cannot avoid flowing onto the mainland and/or Island beaches -- as has been demonstrated here in the past.

2) Shipping lanes are only some 10 miles from the mainland and less from the Islands. In inclement weather this poses a threat of tankers running off course and aground. (You are well aware of the number of such incidents --five of which have occurred during the past two weeks.)

1 3) In prevailing high seas, winds and fog, tankers only slightly off course could collide with existing and future drilling rigs and/or platforms, or with other vessels. (In 1968 two vessels collided in the north bound shipping lane; in 1969 the Lurline, a passenger vessel, narrowly missed colliding with a drilling rig operating on the fringe of the shipping lane.)

4) To date it has been difficult to accurately estimate the exact amount of increased air pollution generated by the SOHIO tanker traffic in the Channel. However, it is known that presently on many days ozone count in that area is higher than established limits.

5. During the past two weeks it has again been demonstrated that containment and recovery systems are not yet effective in handling any sizeable spill. Increasing tanker traffic through the narrow confines of the Channel poses such a threat of pollution which cannot be controlled that it should not be permitted -- especially in this environmentally sensitive area still suffering from a daily flow of oil, uncontrolled since the Platform A blowout.

In your recent briefing in Santa Barbara Admiral Price, of the Coast Guard, stated, in effect, that traffic in the Channel was not heavy enough to worry about additional tanker traffic. It is felt that what has happened in less problamatical areas belies this assertion. We doubt that establishing additional navigational aids and regulations will give adequate assurance of protection from the hazards involved in this proposed route.

Therefore, we urgently recommend that if Long Beach is to be the SOHIO tanker terminal, or unless a terminal with pipeline adjunct is constructed beyond the western entrance to the Channel, regulations be adopted making mandatory routing of all SOHIO tankers outside of the Channel Islands.

As this fleet will be under U.S. registery such regulations could be imposed with the co-operation of the Oil Company, Coast Guard, and other appropriate agencies.

Sincerely yours,

Mrs. George M. Sidenberg, Jr.
President

Past President and Chairman of the Board
Get Oil Out, Inc.

Former Member of the Board of League of Women Voters, Chairman of Legislative Action Committee.

RESPONSES

Comment #1

Discussions of tanker hazards, oil spills and air quality in the Santa Barbara Channel are in Appendix A1.1.1.1-A, Tanker Traffic Study, the Moving Source Study, and Sections 3.1.5.1.2 and 3.1.6.

D/DW DESIGN/DEVELOPMENT WEST INC.
5336 FOUNTAIN AVE. LOS ANGELES, CALIF. 90029
213/469-2145

January 6, 1977

Bureau of Land Management
Project Manager
SOHIO EIS Project Office
P.O. Box 660
Los Alamitos, CA 90720

Re: Alternate Site in Southern California for Proposed SOHIO Crude Oil Transport

Gentlemen:

1 A highly acceptable population-remote, environmentally superior and economically feasible alternate site for importation of Alaskan crude oil is available at Deer Creek in Ventura County just to the east of Point Mugu State Park. Your serious consideration of this alternative site is respectfully requested even though SOHIO or others in the petroleum industry have not offered it as an alternate import point.

From 485 to more than 2,000 acres of isolated foothill land may be obtained for shore facilities serving a deepwater port accomodating all classes of tankers within two miles of shore, and in an open-ocean location of relatively calmer wave action, tides, ocean current, air movement and maritime traffic. Additionally, if not most important, the Deer Creek site is quite remote from populated areas, with fewer than 300 residents within five miles. Further, the Deer Creek site is nearly surrounded with public park lands assuring no urban encroachment pressures. Its remote location in southern Ventura County may be inter-connected economically with the Elk Hills Naval Petroleum Reserve also, thus bolstering its desirability from a national security standpoint.

Crude oil throughput from Deer Creek will require approximately 50 miles more pipeline than if from Long Beach; but over 100 miles less than Point Conception. Pipeline routing can by-pass the Los Angeles metropolitan area; or may tie in with existing pipelines serving Southern California refineries.

Location of a deepwater port at the Deer Creek site has been studied sufficiently to determine preliminarily its feasibility and environmental superiority to the Long Beach Harbor proposal. No dredging will be needed. Ship-to-shore distance is quite adequate for VLCC's and ULCC's and lesser tonnage oil tankers. Marine traffic is light, and the port site is on the Coastal shipping lane.

With regard to the National Environmental Policy Act of 1969, the following brief statements apply to a crude oil deepwater port and shore terminal at Deer Creek.

1. Environmental Impact of the Proposed Action:

   a. Temporary destruction of kelp beds and marine habitat at the extreme northwest end of a significant marine ecological preserve, which may be mitigated by prompt replanting of kelp beds.

   b. Conversion of chaparral-covered foothill land to an industrial use.

   c. Reduction of wildlife habitat in the Santa Monica Mountain Range.

   d. Potential oil spills in open ocean waters affecting Santa Monica Bay and shoreline.

   e. Reduction of hazardous fuel handling to a remote location from populations and urban activities.

   f. Reduced air pollution impact for the Los Angeles-Orange County Air Basin.

   g. Shorter overland pipeline routing for crude oil throughput to the Midwest.

2. Any adverse environmental effects which cannot be avoided, should the proposal be implemented.

   a. Minor temporary disturbance of marine ecological preserve area.

   b. Permanent loss of foothill natural habitat for native flora and fauna.

   c. Increased oil tanker traffic along a scenic coastline.

   d. Temporary destruction of natural cover along pipelines from shore terminal to points of connection with existing pipelines.

   e. Increased potential for open-ocean oil spills resulting from tanker collisions.

   f. Increased fire hazard potential in high fire hazard foothill area of Ventura County.

   g. Minor reduction of scenic and recreational ocean shoreline for an energy-related use where terminal facilities traverse beach line.

3. Alternatives to the Proposed Action;

   a. No crude oil import terminal in Southern California

   b. Approval of the highly-populated Long Beach Port site.

   c. Approval of more environmentally sensitive Point Conception site.

   d. Approval of the more populous Oxnard-Port Hueneme site having greater limitations for larger tonnage crude oil tankers and comparable environmental adverse impacts.

   e. Approval of transport routes by-passing Southern California.

4. Relationship between local short term uses of man's environment and the maintenance and enhancement of long-term productivity.

   a. Land Use, - Choice of the Deer Creek site in foothill land of Ventura County would aid in preserving prime agricultural land and remove a hazardous activity to a remote location, minimizing hazards for people and property.

   b. Reduces and disperses hazardous crude oil vessels away from more congested maritime traffic if at Long Beach or Los Angeles port.

   c. Presents an acceptable trade-off of limited California coastal resources for an energy-related activity of state and national significance in contrast with other crude oil import sites under consideration.

   d. Provides a relatively economical location for energy throughput to California and eastern consumer regions with minimal long-term adverse environmental impacts.

   e. Assuming oil spill will occur, provides recovery and restoration in open ocean area and more remote shoreline area.

5. Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

   a. The Deer Creek site poses significantly less degradation of Los Angeles Air Basin air quality than the Long Beach-L.A. Harbor due to its location beyond the western boundary of the air basin and the advantage of mountainous terrain-influenced uplifting air currents.

   b. In balance, a trade-off of remote private open space land, rocky shoreline, and westerly end of a marine ecological preserve for a needed human use activity-energy import for local and national consumers.

   c. Minor degradation of coastal scenic marine resources for some motoring and boating observers.

   d. Conversion of remote non-productive foothill land and offshore area to a hazardous industrial use (fossil fuel import).

   e. Subjection of remote terrestrial and aquatic natural habitat to oil spill hazards instead of populated areas if at Los Angeles-Long Beach or Oxnard-Port Hueneme locations.

Relative merits of Deer Creek as an alternate site to Long Beach for SOHIO crude oil import, if into Southern California, were requested with respect to six areas of concern. Brief statements addressed to these concerns follow.

   a. <u>Domestic and commercial need for the resource.</u>

      Southern California shores provide closer proximity to midwestern and eastern consumer markets for U.S. produced crude oil; and provide relatively calmer ocean waters for offloading such hazardous cargo than other Pacific Ocean frontage in the continental United States. As a trade-off, Southern California should benefit from an energy-sufficient midwest and eastern commercial and industrial community and economic benefits for domestic energy consumers in those regions resulting from more economical Alaskan-source energy supplies.

   b. <u>Environmental and conservation considerations</u>

      Deer Creek offers a remote site for hazardous fuel point-of-entry at minimal sacrifice of natural resources, especially by comparison with the proposed Long Beach harbor and alternate sites being evaluated.

      (1) Critical Los Angeles Air Basin air quality would benefit.

      (2) No harbor dredging would be required or have to be continually maintained. Although initial harbor dredging at Long Beach would be used for expansion of the harbor, future deep-channel dredging could be expected to be ocean disposal with adverse environmental impacts. The Deer Creek alternate site would not.

      (3) Temporary localized disturbance of marine kelp beds could be restored to original condition within about three years. Deepwater port offshore facilities could enhance the marine habitat with more cover and protection for marine life and improvement of near-shore fishery resources.

(4) Existing foothill land at Deer Creek is marginal as natural habitat in the Santa Monica Mountains. The State has already acquired or is negotiating for prime habitats in the western mountain area. Deer Creek has been ranked of lower recreational value. Location of petroleum import facilities at Deer Creek will cause least loss of recreational resources.

(5) Industry concerns

Deer Creek provides a hazardous industry location well-removed from population concentrations, thus reducing or minimizing potential accidental losses. Excluding a safe-harbor location such as the heavily populated Long Beach-Los Angeles Harbor, the open-ocean Deer Creek site is in calmer waters than most other sites being studied, due to a great extent to the Channel Islands buffering effect.

Recent heavy tanker navigational incidents along both the Pacific and Atlantic seaways and harbors accentuate the need for a relatively safe, remote site for marine tanker traffic. Pacific Ocean sites farther north are in more severe ocean environments for tanker transport of petroleum products.

c. Possible Conflicts Between User Groups

Deer Creek is between two major state parks--Point Mugu and Lec Carillo Beach State Parks--most heavily used on weekends primarily for day use recreational activities. Some opposition from recreation purists may be expected due to proximity of a crude oil terminal near these State parks. A counter-argument, however, is that these transient recreation users cause low people concentrations while in the parks, and are highly mobile should evacuation be needed. Further, these parks assure a permanent fore-closure of urban or suburban population pressures result-ing from continuing regional residential and commercial growth.

A significant marine ecological preserve within the State three-mile limit from Latigo Canyon to Hueneme Canyon (marine) would be effected by an offshore mooring buoy and pipeline-to-shore type of deepwater port at Deer Creek. This location is popular for skin-diving and sport fishing. Some conflicts from these user groups may be expected in the short term until the marine habitat is stabilized after port construction. Additional controversy may develop because of potential oil spills in the vicinity of the preserve.

d. Environmental Conditions as They Effect Safety and Protection from Environmental Pollution

The remote location of Deer Creek as a crude oil terminal makes it far safer than Long Beach or other sites being studied with respect to potential explosions or fires.

Air pollution caused by petroleum off-loading should be significantly lower within the Los Angeles and Ventura-Oxnard Air Basins with the crude oil port at Deer Creek due to the Santa Monica Mountains and prevailing air currents.

A crude oil offloading spill or tanker accident two to three miles off-shore provides a greater margin for containment and recovery than the Long Beach Harbor and some sites being studied.

e. Economic Benefits from the Development to the National and Regional Economies.

A deepwater crude oil port at Deer Creek adequate to off-load V.L.C.C. and U.L.C.C. Tankers would expand regional ability to import low sulfur foreign crude oils needed for local air quality conservation while providing throughput facilities for heavier Alaskan crude oil to midwestern refining and distribution facilities. Ventura County and the State of California would enjoy the greatest economic benefits from crude oil import revenues and local employ-ment.

Whereas a Long Beach crude oil terminal will require pipe-lines along a highly urbanized route, a Deer Creek terminal may be connected by pipelines routed through rural and less populous areas at potentially lower costs to the industry and ultimate consumers.

The Deer Creek site may further benefit Ventura County and the State of California by concentrating both tanker-imported and Outer Continental Shelf curde oil by pipelines, and even natural gas, instead of expanding such industrial uses in prime agricultural lands of the Ventura-Oxnard plain.

In summary, location of a deepwater port and distribution terminal at Deer Creek, by comparion with other sites being considered, has much to offer on environmental and economic grounds. Although late in being offered as an alternate site, your serious consideration of this remote site is respectfully requested.

A project proforma and a preliminary Draft Environmental Impact Report for the Deer Creek site were delivered to the BLM Project Office in November for your review. Please feel free to contact me at 213/469-2145, or by letter to the address noted above.

Sincerely yours,

DESIGN/DEVELOPMENT WEST INC.

Samuel W. Bridgers

Samuel W. Bridgers
President

cc: L. Mansdorf
Assemblyman Terry Goggins (Calif.)
Maurice V. Scherb, Calif. Energy Res. Cons. & Deve. Comm.
SOHIO (Mr. Fred Garibaldi)

RESPONSE

Comment #1

This alternative has been discussed in Section 8.2.7.

9534 Lakeshore NE
Seattle, Wa. 98115
Jan. 6, 1977

Project Manager
BLM Project Office
P.O. Box 660
Los Alamitos, Calif. 90720

Project Manager:

1 I believe the DES titled "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas" does not adequately project the adverse effects to be expected on marine and land wildlife. For example, though many species are listed that would be affected by oil spillage, a detailed analysis was not attempted because of a stated lack of data. Surely with the increasing number of major oil spills enough scientific data has accumulated to make at least a preliminary appraisal of the forecast damage.

2 Impacts on wildlife are sometimes omitted from pertinant areas. To site one example, the construction of transmission lines in desert areas will greatly affect the wildlife of that area - a fact I consider at least as important as the deterioration of the visual quality.

As a Washington resident, I agree that the proposed Long Beach route is safer than shipment through Puget Sound. Large tankers would greatly endanger the rich aquatic life of Puget Sound and are best kept to the open ocean as much as possible.

Sincerely,

David Uvelli

David Uvelli

Seattle Audubon Society

RESPONSE

Comment #1

New investigations are in progress as a result of recent tanker accidents and spills. The investigations were not completed in time for use in the FES.

Comment #2

The wildlife impacts are based on available data with emphasis on critical areas. Because precise information on proposed power-line rights-of-way is lacking at this time, these facilities will require environmental analysis reports when formal applications are made from public utility companies. References to the need for these additional analyses have been added to Sections 1.2.3.2, under Transmission Lines, and 3.0, Summary of Major Impacts.

January 9, 1977

U.S. Bureau of Land Management
California State Office
Sohio E.I.S. Project Office
Building 55 - P.O. Box 660
Los Alamitos Naval Air Station
Los Alamitos, California 90720

Dear Sirs:

I have had opportunity to review parts of your Draft EIS, particularly those pertaining to impacts to the desert ecosystems from construction of new pipeline in Riverside County between Ford Dry Lake and Blythe.

1 In that particular section of your proposed construction, I can find no mention of impacts to the Chuckwalla Valley Dune Thicket, although it is clear that the pipeline would bisect this area, thereby creating substantial impacts to a very unique ecosystem.

2 As a general comment, I find your assessment of environmental impacts to the desert very lacking and shallow. Impacts to wildlife have not been properly assessed. Some types of wildlife haven't even been mentioned, specifically birdlife.

3 Impacts to the ecosystem from wind erosion as a result of construction have not been adequately assessed, despite the fact that the Ford Dry Lake to Blythe segment is in an area of high seasonal winds.

Perhaps it is because your EIS team did not spend adequate time in the field looking at this area that your assessment is so lacking. Because of the lack of adequate baseline surveys for almost any resource, environmental assessments cannot rely solely on literature searches for significant projects such as yours.

Please send me a copy of the Draft and Final EIS documents. I would like to comment more fully and monitor this project as its planning progresses. In regards to the Ford Dry Lake to Blythe segment, I see no reason for constructing the pipeline so far from Interstate 10. Many of the more serious impacts can be avoided, particularly to the Dune Thicket, if you keep construction close to the highway.

Sincerely yours,

Ike Eastvold

Ike Eastvold, Chairman
CDAC Desert Watch
Society for California Archeology
541 Prospect St., Highgrove 92507

RESPONSE

Comment #1

The Chuckwalla Valley Dune Thicket was referred to in the Draft ES as an unnamed desert wash. The text has been changed throughout to correct this error. The new proposed alignment in this area will be to the north of this thicket by more than .75 mile.

Comment #2

A discussion of birds in the California desert has been added in Section 2.1.8.2, Colorado Desert Biome, of the FES.

Comment #3

The Standard Soil Survey of Palo Verde Area, Calif., 1974, prepared by the Soil Conservation Service, a Federal agency, identifies these soils along this segment as having low susceptibility for wind erosion. This would be particularly true when placed in the context of a onetime excavation and backfill operation (5 cu yd/ft) and a rate of progress of .5 mile or more per day. Section 2.1.4.2, Colorado Desert, has been changed to clarify this.

4 January 1977

Project Manager - Sohio Project
Bureau of Land Management
P. O. Box 660
Los Alamitos, California 90720

Subject: Comments on Draft Environmental Impact Statement - Crude Oil Transportation System: Valdez, Alaska to Midland, Texas

Dear Sir:

Attached are subject comments submitted for your consideration.

Sincerely,

John P. Forrest

John P. Forrest
4300 Lynhurst Circle
Santa Maria, California 93454

COMMENTS ON DRAFT ENVIRONMENTAL IMPACT
STATEMENT CRUDE OIL TRANSPORTATION SYSTEM:
VALDEZ, ALASKA TO MIDLAND, TEXAS

The Save Our Central Coast Committee, an organization of public spirited citizens from San Luis Obispo County and Santa Barbara County, expresses its interest and grave concern regarding the proposed Central Coast supertanker port. In our view, no problem could be more crucial to the health and well being of the community and its citizens. In accordance with its announced principles, S.O.C.C.C. presents its preliminary position regarding its opposition to the proposed supertanker port.

S.O.C.C.C. subscribes its opposition to two basic principals:

1. The draft E.I.S. does not address the position of the Sohio project with respect to a national long range energy plan for transporting, refining and distributing the increasing volumes of crude oil, refined products and gas that will be required in the future and the amount of crude that will enter the United States through California. A nation-wide energy plan is required to be developed at both State and Federal level so that the practicability, desirability or necessity of any individual project by an individual corporation can be assessed. If individual projects, such as the Sohio Project, are implemented prior to completion of a National Plan, a hodge podge development will surely be created. 1

2. THE DRAFT FAILS TO CONSIDER SATISFACTORILY THE SERIOUS QUESTIONS WHICH EXIST CONCERNING THE SAFETY OF SUPERTANKERS AND THEIR OPERATING PROCEDURES. 2

The general requirements of C.E.Q.A. and the function of an EIS is to inform and ensure that all reasonable alternatives and mitigating measures to a proposed project be thoroughly assessed. S.O.C.C.C. is very interested and concerned in the long-range steps necessary to develop, transport and distribute a continuing supply of oil and gas. In view of climatic conditions, of geologic and geographic characteristics of the Central Coast area we urge that our concerns be given serious consideration. We eagerly await, therefore, the results of the current hearings.

John P. Forrest
S.O.C.C.C. Chairman

RESPONSE

Comment #1

The scope of the Environmental Statement is a crude oil transportation system from Valdez, Alaska, to Midland, Texas. It is not within the scope of the project to determine national energy policy.

Comment #2

Chapter 8 has been substantially revised and expanded in its discussion of alternatives including impacts of central California port alternatives.

SIERRA CLUB 530 Bush Street San Francisco, California 94108 (415) 981-8634

January 4, 1977

Testimony on
CRUDE OIL TRANSPORTATION SYSTEM: VALDEZ, ALASKA TO MIDLAND, TEXAS
BEFORE THE
DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT

C. FREEMAN ALLEN for the
SIERRA CLUB

I am speaking for the Sierra Club primarily on air quality issues. To begin, I want to express appreciation for the care with which the environmental analysis has been prepared for this project, and for the opportunity to testify.

The Sierra Club has taken the position that industrial facilities are best located in already industrialized areas. Long Beach is thus a logical site for this project in Southern California in terms of land use. But there are serious problems, particularly in respect to air quality and safety. According to the Draft Environmental Impact Statement (DEIS), oxidant level in this air basin is expected to be even worse in the year 2000 than it is today. The cause of this increase will be primarily increased hydrocarbon emissions from stationary sources such as the one we are considering. Therefore the introduction of new sources of air pollution into this already heavily overloaded air basis must be accompanied by strict and effective emission controls which insure substantial progress toward attainment of the Clean Air Standards. Alternatives to the proposed pipeline project should be sought and carefully analyzed: The exchange
1 of surplus Alaskan crude oil for foreign crude to be delivered directly to Gulf or Eastern United States ports is such an alternative which might have advantages on either a short-term or long-term basis. In any case, the pipeline system should not be permitted until it is certain that the distribution of natural gas to California will not be significantly impaired by loss of the pipeline to delivery of natural gas, and that its loss will not force establishment of hazardous LNG facilities.

The major air quality concerns over the proposed Transportation System are with emissions from tankers, and particularly the emissions resulting from ballasting and purging operations. There is apparently no control on the purging
2 of tankers within the coastal airshed, nor is there in the DEIS an analysis of the impact of such emissions at sea on the air quality over the land mass.

2 Emissions fifty miles or more offshore could have significant impact, particularly with large tankers which may emit twenty tons or more of hydrocarbon vapor on purging. Careful analysis of such impacts should be made, and controls developed to insure that either emissions are kept at an insignificant level, or that they be balanced by trade-offs of other sources of emissions. Now that fishing controls are being extended to a 200 mile offshore limit, it may be a particularly appropriate time to consider control of pollution by ships at sea.

Some tankers using the common carrier pipeline terminal will emit very substantial amounts of hydrocarbon during their stay in port. This is particularly true of non-inerted tankers without segregated ballast, or with minimal segregated ballast. Such ships will emit several tons of hydrocarbon during unloading and ballasting, and much greater amounts in the (unlikely) event that the purged in port. Emissions from such operations should either be prevented, or included in the emission trade-off calculations.

Rather than trade-off for hydrocarbon vapor emissions, it would be more effective to control these emissions. Development and installation of safe on-shore vapor recovery systems to remove reactive hydrocarbon vapors from the hold gases does not seem an insurmountable problem beyond the reach of technology within the near future. Such installations would have the very real advantage of eliminating air pollution either near shore or at sea, while possibly reducing the explosion hazard aboard ships without inerting systems. We suggest that the design and installation of such facilities be moved along as rapidly as reasonably possible.

Tankers not controlled with segregated ballast, inerting, vapor recovery, or other devices for minimizing emissions and explosion hazard should not be allowed to use the port facilities, or at least should be required to pay a substantial permit fee based on their size. (Hydrocarbon pollutants have been estimated to cost as much as $3,000 per ton in damage to this air basin). The income from fees should then be used for air pollution abatement.

If air pollutant tradeoffs are to be allowed to compensate for the impact of the Transportation System on air quality, the tradeoffs must more than compensate for the new emissions so that net progress is made toward the attainment of cleaner air in the area which receives the impact of the pollutants. Trade-off credit must not be allowed for cleanup of emission sources which could be replaced by new sources for which a permit to construct is not required. Neither should trade-off credit be allowed for emissions on which controls are now in existance (or likely to be soon forthcoming) but not yet enforced. Only under such conditions are we likely to achieve and maintain acceptable air quality in future years.

We should take the time necessary to plan this project properly, considering such issues as the supply of adequate natural gas to California and the design of appropriate emission control and safety systems. Workable alternatives appear to be available in the interim. It would be unfortunate indeed if unnecessary haste resulted in a serious mistake.

RESPONSE

Comment #1

The discussion of an exchange of oil with a foreign nation, such as Japan, has been revised in Section 8.1.1 of the FES. The terms of existing legislation concerning such a trade have been clarified, and impacts discussed are similar to the No-Action alternative.

Comment #2

These concerns are addressed in Section 3.1.6.1.3 of the FES under Operations in Coastal Waters. Also refer to the Moving Source Study.

TESTIMONY PRESENTEO BY

H. OOUGLAS LEMONS
VICE PRESIOENT
ECONOMIC OEVELOPMENT

LONG BEACH AREA CHAMBER OF COMMERCE

JANUARY 4, 1977

BEFORE THE

BUREAU OF LANO MANAGEMENT
OEPARTMENT OF INTERIOR

IN LONG BEACH

AT THE HEARINGS OF THE

ORAFT ENVIRONMENTAL IMPACT STATEMENT
CRUOE OIL TRANSPORTATION SYSTEM: VALOEZ, ALASKA TO MIOLANO, TEXAS
(AS PROPOSEO BY SOHIO TRANSPORTATION COMPANY)

GOOO MORNING GENTLEMEN. MY NAME IS H. DOUGLAS LEMONS ANO I AM VICE PRESIOENT OF ECONOMIC DEVELOPMENT FOR THE LONG BEACH AREA CHAMBER OF COMMERCE. I RESIOE AT 295B OANELAND STREET, LAKEWOOD, CALIFORNIA. IT GIVES ME A GREAT OEAL OF PLEASURE TO OFFER MY COMMENTS RELATIVE TO THIS FEDERAL ENVIRONMENTAL IMPACT STATEMENT.

WE ARE HAPPY TO NOTE THAT MANY SECTIONS OF THIS OES AGREE WITH A STANO LONG TAKEN BY THE LONG BEACH AREA CHAMBER OF COMMERCE - THAT THE PORT OF LONG BEACH IS THE ONLY RIGHT PLACE FOR CONSTRUCTION OF A TANKER TERMINAL AT WHICH AMERICAN OIL FROM ALASKA MAY BE RECEIVED. AS WE REVIEW THE ALTERNATIVES SEGMENT OF THE OES, LONG BEACH WAS CONSPICUOUSLY THE ONLY VIABLE LOCATION CHOICE. IT IS OBVIOUS THAT THE PORT HAS AN EXCELLENT RECORO IN HANDLING OIL IMPORTS, EVEN THOUGH MOST OF THAT OIL COMES IN FROM FOREIGN SOURCES, IN FOREIGN VESSELS, BUILT BY FOREIGN NATIONS, MANNEO BY FOREIGN CREWS. WITH THE IMPROVED MOOERN FLEET SOHIO PROPOSES, WHICH WILL HAVE ALL AMERICAN CREWS, THERE IS EVERY REASON TO EXPECT AN EVEN BETTER RECORD OF PERFORMANCE.

WE IN LONG BEACH ARE JUSTLY PROUD OF OUR PORT. IT IS ONE OF THE NATION'S LEADING PORTS IN TERMS OF TONNAGE, AND IS RECOGNIZED WORLD-WIOE FOR ITS MODERN FACILITIES AND ENVIRONMENTALLY SAFE OPERATIONS. THUS, IT MAKES MORE SENSE TO GO WITH A PROVEN TRACK RECORO, AND PICK A WINNER RATHER THAN AN ALTERNATIVE THAT OFFERS NO HISTORICAL CREOIBILITY OF BEING ABLE TO HANOLE EFFICIENTLY AN OPERATION THAT COULD HAVE MAJOR ENVIRONMENTAL REPURCUSIONS.

HAVING SAID THIS, WE WOULD LIKE TO RAISE SEVERAL ISSUES RELATIVE TO THE DES WHICH WE FEEL THE CONSULTANTS HAVE FAILED TO ADDRESS ADEQUATELY, OR WHICH ARE MISLEADING.

1 IN THE NO PROJECT ALTERNATIVE SECTION OF YOUR OES, WHY WAS IT NOT EXPLAINED THAT THE ALASKAN OIL IS COMING TO CALIFORNIA WHETHER THE SOHIO PROPOSAL GOES OR NOT, AND THAT WITHOUT THE SOHIO PROJECT THAT OIL WON'T BE HANOLEO WITH SHIPS USING SAFER SEGREGATEO BALLAST TANKS, CLEANER SEGREGATEO FUEL TANKS FOR BURNING LOW SULPHUR FUEL WHILE IN PORT, SOPHISITICATED ANO SAFE INERTING PROCEOURES, AND NEW

2 FLOATING ROOF OIL TANKS ON PIER J. WE BELIEVE THE DES SHOULD GIVE MORE EMPHASIS TO THE FACT THAT SOHIO IS COMMITTEO TO USE THE BEST AVAILABLE TECHNOLOGY IN CLEANING UP OTHER AIR POLLUTION SOURCES AS A MEANS OF OFFSETTING ANY REMAINING NEW POLLUTION THEIR PROJECT MIGHT CAUSE.

ANOTHER POINT WE CAN'T UNDERSTAND IS WHY THE STATE SEEMS TO WANT TO PUT THIS PROJECT IN SAN LUIS OBISPO OR SANTA BARBARA COUNTY WHERE THERE ARE FEW HOUSES OR SCHOOLS FOR THE PEOPLE WHO WOULD BE EMPLOYEO BY THIS PROJECT ANO WHERE THERE IS NO CHANCE FOR CLEANING UP EXISTING POLLUTION SOURCES TO OFFSET ANY THAT MIGHT BE CAUSEO BY THIS PROJECT. OOESN'T THE 150 POUNO RULE ALSO APPLY IN THOSE COUNTIES OR IS THIS JUST A CATCH 22 OREAMEO UP BY THE AIR RESOURCES BOARD, AS A WAY TO SHOOT OOWN THE SOHIO PROJECT.

3 WE ARE GREATLY CONCERNED WITH A MISCONCEPTION FOSTERED BY THIS REPORT TO THE EFFECT THAT THIS PROJECT IS DESIGNEO FOR THE EXCLUSIVE USE OF THE SOHIO COMPANY. SUCH IS NOT THE CASE. THE PURPOSE OF THIS PROJECT WOULD BE THAT OF TRANSPORTING SURPLUS OIL FROM THE NORTH SLOPE OF ALASKA TO THE EASTERN PORTION OF THE UNITED STATES. THAT SURPLUS OIL MIGHT VERY WELL BELONG TO A COMPANY OR COMPANIES OTHER THAN SOHIO, SUCH AS ARCO, EXXON OR EVEN THE SOVEREIGN STATE OF ALASKA ITSELF, WHICH INCIOENTLY OWNS 12 PERCENT OF ALL NORTH SLOPE OIL PROOUCTION. THIS SYSTEM WHEN COMPLETEO WOULD BE USEO TO TRANSPORT ALL AMERICAN OIL WHICH IS NOT NEEOEO ON THE WEST COAST. IT IS OUR FEELING THAT THIS REPORT OOES NOT FULLY EMPHASIZE THIS IMPORTANT ASPECT OF THE SYSTEM.

IN OROER FOR OUR COUNTRY TO ATTAIN ITS GOAL OF TOTAL ENERGY INDEPENOENCE, ANALYSIS OF ALL ENERGY-RELATED REPORTS MUST BE VIEWED WITH COMPLETE OBJECTIVITY. THIS OES IS OBJECTIVE IN ITS FINDINGS ANO WE COMMEND THE STAFF FOR ITS PREPARATION. UNFORTUNATELY, THE SAME OBJECTIVITY CANNOT BE ATTRIBUTED TO TWO OTHER MAJOR REPORTS WHICH HAVE GREATLY INFLUENCED THINKING NOT ONLY OF THE GENERAL PUBLIC BUT MANY OFFICIALS AS WELL REGARDING THE TRANSPORTATION OF CRUDE OIL FROM ALASKA TO THE PORT OF LONG BEACH AND BEYONO. WE SPECIFICALLY REFER TO A REPORT PUBLISHEO BY THE FEA ANO A MORE RECENT DOCUMENT PREPAREO BY THE ENERGY COMMISSION OF CALIFORNIA.

BOTH REPORTS ARE QUITE CRITICAL OF THE SOHIO PROJECT AS IT IS PRESENTLY PROPOSED. INTERESTINGLY, BOTH THE FEDERAL OOCUMENT AND THE STATE REPORT WERE WRITTEN BY THE SAME PERSON. YES, IT IS TRUE. BOTH THE FEDERAL GOVERNMENT REPORT ANO THE STATE GOVERNMENT REPORT WERE WRITTEN BY ONE MAN. THAT FACT BY ITSELF UNDERCUTS THE VALUE AND CREOIBILTIY OF BOTH REPORTS.

BUT, THE STORY GETS MORE INTERESTING. THE AVERAGE READER IF ASKED ABOUT THE AUTHOR OF THESE REPORTS MIGHT SAY MANY THINGS, BUT WOULD NEVER DREAM THAT THE AUTHOR WAS LESS THAN OBJECTIVE, UNBIASED ANO TOTALLY PROFESSIONAL. AFTER ALL, WHEN YOU READ ONE OF THESE GOOD-SIZED TELEPHONE BOOKS, THE LAST THOUGHT THAT WOULD ENTER YOUR MIND IS THAT THERE WOULD BE THE PROBLEM OF PROFESSIONAL OBJECTIVITY. YET THE AUTHOR OF BOTH THESE REPORTS, A MR. ROBERT SHINN, IS NOT YOUR TYPICAL UNBIASED SCIENTIST. MR. SHINN, JUST TWO YEARS AGO, RAN FOR PUBLIC OFFICE ON AN ENVIRONMENTAL PLATFORM.

<u>YES, JUST TWO YEARS AGO, MR SHINN RAN FOR CITY COUNCIL IN THE CITY OF LONG BEACH.</u>

IN HIS CAMPAIGN LITERATURE, HE PROCLAIMS HIMSELF AS AN URBAN PLANNER, AIR QUALITY EXPERT, ENERGY EXPERT, TRANSPORTATION EXPERT, POLITICAL REFORMER, ANO OH YES, AN OCEANOGRAPHER.

4 THE DES ALSO FAILS TO MENTION THE FACT THAT APPROXIMATELY 900,000 BARRELS PER DAY OF FOREIGN CRUDE WILL BE REPLACED BY A LIKE NUMBER OF BARRELS OF GOOD OLD AMERICAN OIL FROM ALASKA,WHICH MAY BE TRANSPORTED BY THIS SYSTEM. THIS FACT ALONE GOES DIRECTLY TO THE HEART OF AMERICA'S STRUGGLE FOR A PROGRAM OF ENERGY INDEPENDENCE, AND A PROGRAM WHICH WE HAD DAMN WELL BETTER GET ABOUT IMPLEMENTING AND SOON.

UNFORTUNATELY WE TOO OFTEN ADOPT THE SAME ATTITUDE AS THE FARMERS HOUND DOG THAT WAS SEATED ON A COCKLEBURR AND DID NOTHING MORE THAN JUST SIT AND HOWL. THE FARMER SAID THE OLD DOG FELT THAT IT WAS EASIER TO JUST SIT AND WHINE RATHER THAN MOVE OFF THE COCKLEBURR. THE ENERGY CRISIS HAS BEEN LIKE A COCKLEBURR TO WE AMERICANS FOR QUITE SOME TIME NOW. WE THINK IT'S HIGH TIME TO QUIT WHINNING AND GET OFF THE BURR.

I THANK YOU FOR THIS OPPORTUNITY TO PRESENT MY OBSERVATIONS ON THIS CRITICALLY IMPORTANT PROJECT. I DON'T SUFFER FROM THE PALSY THAT AFFLICTS OUR TOP STATE OFFICIALS AND THAT CAUSES ONE CRISIS AFTER ANOTHER. CRISIS MANAGEMENT IS INEFFICIENT MANAGEMENT AND AS A VICE PRESIDENT OF THE CHAMBER OF COMMERCE I DON'T LIKE TO SEE OUR STATE GOVERNMENT BEING INEFFICIENTLY MANAGED AS IS DEMONSTRATED BY THE LACK OF LEADERSHIP IN SACRAMENTO ON THE QUESTION OF PROVIDING OUR NATION WITH DOMESTIC ENERGY.

RESPONSE

Comment #1

The No-Action and Delayed Action alternatives in Sections 8.0.1 and 8.1 of the FES have been revised to state that some Prudhoe Bay oil will be handled at Los Angeles-Long Beach ports by SOHIO regardless of whether the proposed terminal and pipeline is approved.

Comment #2

It is mentioned in Section 2.1.6.5, under Air Quality Planning, that the current new source review rules use a mixture of techniques to limit emissions from major new sources. Since best available technology is only one ingredient in the negotiation process between SOHIO and the EPA or the CARB, there are no grounds for emphasis. Section 2.1.6.5 in the FES now refers the reader to the text of the regulations in Appendix A3.1.6.1.2. Section 2.2.6.4 also should be consulted.

Comment #3

Section 1.0 has been revised to reflect this comment.

Comment #4

As discussed in Sections 2.1.16.5 and 3.1.16.5, the analysis assumes a back out of 200,000 barrels of foreign crude, not 900,000 barrels.

League of Women Voters of Long Beach Area

1001 EAST FOURTH STREET, LONG BEACH, CALIFORNIA 90802 · TELEPHONE 435-3968

January 4, 1976

SOHIO Project Manager
The Bureau of Land Management
Box 660
Los Alamitos, California 90702

Dear Sir:

The Long Beach Area League of Women Voters raised a number of questions at the Public Hearing of November 30 on the SOHIO proposal, held jointly by the Port of Long Beach and the Public Utilities Commission of California. We think that two of these are especially pertinent to your consideration of the matter. They are as follows:

1. What will be the environmental impacts of Phase II? Only two years after the 1978 target date for this facility, the quantity of oil off-loaded here for transmission may be doubled, from 500,000 to 1,000,000 barrels per day. Beyond stating that one more berth, six more supertankers, eight more storage tanks and another natural gas pipeline will be required, only the most superficial information is given on the additional environmental impact this second phase will bring. What is the possibility that at least one of these pipelines may be needed in the future to transport natural gas to California? Should not the entire project be evaluated now, rather than having it considered on a piecemeal basis? Before we are committed to building this facility, should we not assess the effects of the total plan? 1

2. Will this project lead to national oil independence or dependence? The Environmental Impact Report prepared by the Port of Long Beach states that "Delivered Alaskan crude will also promote growing domestic consumption of this non-renewable resource." (Vol. I, Part I, pp. 5-15) Again, "Within the United States, use of non-renewable petroleum by the present generation will necessarily deprive future generations of its use. This deprivation will shorten the time span during which energy resources other than fossil fuels can be developed." (Section VIII-1, Vol. I-1). On whom will we be forced to depend if we have not had time to develop affordable alternate sources? What price can then be asked? The estimated life of this project is forty years. 2

We hope you will consider carefully the many concerns about the environmental impacts of this proposed project. The requirements of marketing SOHIO oil must be weighed against threats to the health and safety of our people and to the integrity of our common lands. The responsibility you bear in this decision is a grave one.

Sincerely,

Ina Aronow

Ina Aronow
President

RESPONSE

Comment #1

Any future proposal for Phase II would be covered by an additional Environmental Statement which will analyze the question of abandoning a second natural gas line.

Comment #2

The project, for its lifetime, would help to relieve dependence on foreign oil. The scope of the project does not include determination of national energy policy.

Friday, December 3, 1976

Mr. Charles H. Tulloss, Project Manager
Bureau of Land Management
P.O. Box 660
Los Alamitos, Calif. 90720

Dear Mr. Tulloss:

In a conversation with a Mr. Jannich (sp)a member of your group, I learned that your Environmental Impact Statement had a great many critical and damning areas of criticism about the two 615,000-barrel surge/storage tanks SOHIO wants to install at Hynes in North Long Beach.

When these criticisms did not get into print in your EIS I feel that our case in opposition to locating these tanks in our "backyards" lost a great deal of support.

Would your office give us in writing please the position you took for not listing these criticisms in your EIS?

1 We would also like to have the statements regarding your findings against locating these tanks at Hynes for it now appears that SOHIO and the Harbor Department are intent on this location, hazardous though it may be for our health and lives. I remain

Very sincerely

Frank H. Arundel

Frank H. Arundel, Chairman
Cherry Manor Area Homeowners Assn.
2268 East 63rd Street
Long Beach, Calif. 90805

c.c.: Secty. Sandra Hess
Congressman Hannaford
Atty. Kenneth Zommick

RESPONSE

Comment #1

The Dominguez Hills terminal has been selected by the applicant for the inland terminal instead of the Hynes terminal. See Section 1.1.1.1, under Details of California Route.

Testimony of Don May

for

Friends of the Earth

before the

Bureau of Land Management

Draft Environmental Impact Statement
Crude Oil Transportation System:
Valdez, Alaska, to Midland Texas
Proposed by Sohio Transportation Company

January 4, 1977

FRIENDS OF THE EARTH, INC. 529 COMMERCIAL SAN FRANCISCO CALIFORNIA 94111

Thank you for this opportunity to testify on this Draft Environmental Impact Statement which discusses Standard Oil of Ohio's proposal to bring "surplus" Alaskan oil to Midwest markets. We will try to stifle a loud, "We told you so," but perhaps it is instructive to remember how we got into this ludicrous situation, where Alaskan oil, which was supposed to be a solution to this country's energy problems, has become a problem in itself.

In 1973, when the Trans-Alaska pipeline bill was debated in the Congress, efforts by environmentalists to force consideration of an all land route through Canada--which seemed safer and which would have brought the oil to the region of the country that needed it most--got nowhere, and Congress mandated a pipeline route across Alaska ending in a marine terminus at Valdez. Just what the oil companies wanted since oil was discovered on the North Slope.

Skepticism about the ability of the West Coast to absorb the full production of the pipeline fell on deaf ears. Secretary Morton wrote to Congress on April 4, 1973, that "The best available projections show that by 1980, and for subsequent years, the West Coast demand will exceed domestic production and Canadian exports available in that area by at least the capacity of the Trans-Alaska pipeline."

Less than a year later we read reports in the press speculating about what would happen to the "surplus" of crude oil that was expected on the West Coast as a result of full production of the pipeline.

Now we have Sohio's proposal for a most cumbersome way of distributing this surplus, as well as the Bureau of Land Management's analysis of various alternative methods of getting North Slope oil east. Unfortunately, all of the "solutions" presented pose a series of additional problems. There seems to be no good way of getting this Alaskan oil to market.

Certainly Sohio's plans for Long Beach create more problems than the distribution problem it solves. A superport on the West Coast, with the potential for massive oil spills. More air pollution for Long Beach, with tradeoffs that will at best insure that the present unhealthy situation persists. Conversion of one, and, you can bet on it, two natural gas lines presently serving Southern California for oil delivery east. (The California market cannot use all of the Alaskan oil, but we think everyone will agree that it can use all the natural gas it can get.)

The other alternatives described in the Draft EIS are equally unpalatable. A superport off the British Columbia coast with a pipeline through Canada, or one off Puget Sound with a pipeline across five northern tier states. The Panama Canal route seems to make the most sense, but it

probably won't be chosen as a long term solution because of transportation costs. An exchange of oil between Chicago and Japanese refiners seems to pose the fewest environmental problems, but such exchange would set an unfortunate precedent and would not reduce our reliance on foreign oil.

However, there is one other alternative that has received little consideration which we think should be discussed in the Final EIS: government purchase of the surplus oil for a strategic reserve. Under H.R. 49 passed by the 94th Congress, the government is authorized to set up
1 a strategic reserve of a six month supply, over a billion barrels, of oil. Why couldn't the U.S. purchase at least some of the North Slope surplus, and leave it in the ground in Alaska until it is needed? By our calculations, the first six years of the projected West Coast surplus comes to just over a billion barrels.

Granted, this would not bring Alaskan oil to the Midwest; we would still have to import that oil. But this strategic reserve will have to come from somewhere, and it will have to be stored somewhere. Why not buy North Slope oil and store it in the North Slope? It makes every bit as much sense as buying Mideast oil for the strategic reserve and storing it in salt domes. And it makes more sense than a superport at Long Beach or Port Angeles.

Page 4 - Friends of the Earth

There are a few other areas which we would like to see discussed in more detail in the Final EIS:

1) The impact of converting two natural gas lines for oil delivery east. BLM assures that any application to abandon a second line will be subject to an environmental impact statement. However, we think it highly unlikely that such an application would be denied if El Paso is successful in obtaining approval to abandon this first natural gas pipeline. In fact, one of the advantages of the Sohio proposal, stressed several times in the DEIS, is that it can easily be expanded.

On page 272 of the Federal Energy Administration's North Slope Crude, Where To? - How? is a section on potential for new pipeline construction. The FEA states that "El Paso responds to the possibility of a deficit capacity of up to 764 mmcf/d under Phase II with the statement that if there were 700 mmcf/d of natural gas to move to California and no pipeline to carry it, it would be appropriate to construct a (new) pipeline. El Paso asserts that this could be done at no significant increase in cost of service to California customers."

The FEA disputes El Paso's assertion by saying that the "Cost of the new pipeline would be at least twice the cost of the abandoned line or $230 million." It also states that the time lag between a decision to construct a new line and start of operation could delay shipmest of available gas to California.

Page 5 - Friends of the Earth

Also, it is interesting to note that El Paso Natural Gas Company has made an application to build a natural gas pipeline parallel to the Alaskan oil pipeline, a route that would require a marine leg and an LNG facility on the West Coast. Couldn't El Paso's abandonment of existing gas lines
2 now serving California be used to justify the "need" for its LNG facility? This possibility must be discussed in the Final EIS.

3 2) The transportation costs of the Sohio proposal must be figured to the nearest major market, Chicago, not merely to Midland, Texas.

4 3) What are the air pollution "tradeoffs" Sohio is willing to make in Long Beach? EPA or the ARB will have the final decision on whether or not these tradeoffs are satisfactory. However, reviewers of this EIS should at least know what the tradeoffs are.

5 4) Why won't the entire Sohio Valdez-Long Beach tanker fleet be equipped with inerting systems? What are inerting systems, anyway?

6 5) Since a major oil spill is recognized as one of the most serious impacts of this proposal, Sohio's Oil Spill Contingency Plans, now in preparation, should have been completed by the applicant in time to be included in this Draft so they could be thoroughly reviewed by federal agencies and the public.

Page 6

6 Friends of the Earth suggests that these Plans be circulated for comment as a supplement to the Draft EIS, not merely included in the Final EIS as now proposed.

Thank you for this opportunity to present our views.

RESPONSE

Comment #1

This is not a viable alternative and hence is not discussed in the ES. Storage of a strategic reserve of crude oil would have to be at a location where it could readily replace foreign crude oil imports. Without a West Coast to mid-continent pipeline, retention of Prudhoe Bay oil in the ground would not be a strategic reserve for those areas of the United States most dependent on foreign oil.

Comment #2

It is outside the scope of this project to analyze future plans of utilities.

Comment #3

It is outside the scope of the FES to discuss economic cost-benefit data. However, please refer to "North Slope Crude -- Where to? How?," published by the Federal Energy Administration: Between pages 224 and 225 there is a map depicting tariffs of several alternative routes to Chicago.

Comment #4

Trade-offs proposed by the applicant and discussions of their effectiveness can be found in Section 4.1.5 of the FES.

Comment #5

A mitigating measure, requiring all tankers using the Pier J facility to be equipped with inerting systems or equivalent, has been added to Section 4.2.2. The description of the tanker inert gas system is addressed in Appendix A1.1.1.1.

Comment #6

The oil spill contingency plan was not developed in time for review as part of the DES. The analysis of the impacts in Chapter 5 of the FES were made with consideration of the general provisions in the oil spill contingency plans. The oil spill contingency plans are available as referenced in the Table of Contents in Chapter 1.

SOUTHERN ARIZONA ENVIRONMENTAL COUNCIL

BOX 49044 • TUCSON, ARIZONA 85717

Jerry Begley

Bureau of Land Management
U.S. Department of Interior
Phoenix, Arizona

Jan 4, 1977

Subject: SOHIO PIPELINE
DRAFT EIS

Dear Sirs:

The Southern Arizona Environmental Council (SAEC) appreciates this opportunity to comment on the draft Environmental Impact Statement (DEIS) prepared by the Bureau of Land Management (BLM) for the proposed system of the SOHIO Transportation Company, to move crude oil from Valdez, Alaska to Midland, Texas.

The SAEC is an organization composed of 27 member organizations, 12 cooperating member organizations, and individual associate members. Normally our actions reflect full consideration and vote by representatives of all the member organizations. In this case there was insufficient time to obtain a vote by the member organizations, and this statement has been approved by the SAEC Executive Committee.

The role of the SAEC is not to categorically oppose proposals which may be environmentally unsound, in whole or part, but to offer constructive criticism designed to improve their environmental impacts whenever possible. In the present instance, an attempt will be made to place the proposal in its correct perspective, to suggest specific ways in which the DEIS should be improved and to supply significant information which is lacking in the DEIS. The following include our recommendations and comments:

1. Surplus Crude Oil

On page 1-4 entitled "1.1 Background in Brief" and the accompanying Table 1.1-1, indicating the anticipated surpluses of crude oil in the West Coast during future years, such surpluses being the reason for SOHIO's making the present proposal. The SAEC is aware of the frantic rush by the large petroleum producers ten years ago to jump on the Alaskan North Slope bandwagon, of the severe competition to acquire North Slope oil rights, of the pressure tactics used by the industry to induce the Secretary of Interior and Congress to approve the hotly disputed Trans-Alaska Pipeline route, all in the face of environmental objections and of widespread claims that the oil would be more urgently needed in the Mid-West and on the East Coast than on the West Coast.

A Council of community organizations working together to improve public understanding of environmental problems.

SOUTHERN ARIZONA ENVIRONMENTAL COUNCIL

BOX 49044 • TUCSON, ARIZONA 85717

SOHIO Pipeline DEIS

1. Surplus Crude Oil (cont)

During the intervening decade, we have witnessed the spectacle of an industry striving to cash in on its investment as quickly as possible, with apparently little regard for the consequences of its pell-mell scramble now reflected in an inferior pipeline to supply oil where it isn't needed after all. We environmentalists might well be pardoned if we now were to proclaim that "We told you so".

2. Alternatives

1 In chapter eight dealing with Alternatives to the Proposed Action, most of those considered are too far-fetched to be feasible, while the most obvious alternative is not even mentioned. That is, an entirely new pipeline from the North Slope across Canada direct to the Mid-West refineries. It is conceivable that this could be dismissed because of duplicated investment and delays in completion, but it should at least receive thorough consideration in the DEIS. There are at least two reasons for this: such a route is presently under consideration for the future gas pipeline; and the Alyeska Oil line now nearing completinn may be a failure in the event of another severe earthquake.

3. Refineries in Arizona

2 Brief mention is made in the DEIS of the possibility of supplying crude oil to an as yet unplanned refinery in Arizona, but there is no follow-up to that item. We regard this to be a serious omission. If the applicant expects the State of Arizona to submit to all the potential risks associated with this proposal, more serious attention to the needs of the State is deserved. We understand that discussions on this subject are indeed in progress currently. If such is the case, there is every reason for treating it as a closely related item to the matter at hand, not as an afterthought, piecemeal fashion. The DEIS should deal with this prospect thoroughly, including discussion of possible sites and their environmental impacts.

4. Lack of Complete Information

3 It is noted that the proposal is to use portions, but not all, of a surplus gas pipeline. A number of significant gaps will be filled with sections of new construction. For some reason, sections of existing pipe line will not be used, and we feel an explanations should be made. The DEIS is replete with references to missing or incomplete information and plans. If the points involved are significant, the DEIS should not be finalized without them. In fact, all reviewers should have such materiel in order to comment intelligently. It is recommended that, as the applicant furnishes the missing data, it be supplied in turn to the reviewers.

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SOHIO Pipeline DEIS

4. Lack of Complete Information (cont)

4 We understand that at one stage the proposal contemplated the use of several surge tanks to control the flow of oil which might otherwise escape from the system with serious consequences. We find no reference to such surge tanks in the present DEIS, and suggest that an explanation be added to the DEIS.

5. Oil Spills by Tankers

5 At the very beginning of the DEIS, on page iii preceding Chapter there is a summary page. The first sentence of paragraph 3, states as follows: "Major oil spills by tankers between Valdez and Long Beach would result in significant adverse impacts on biotic communities, aesthetics and recreational resources in Prince William Sound and along the Southern California coast; however, the occurrence of a major spill would be very rare." (underscoring added). We regard the underscored portion to be a subjective statement which should be deleted. The frequency of spills is not the significant point; if one were to occur on the initial voyage it could be equally as disastrous as one ten years later. Some which have occurred in recent years elsewhere were of such magnitude as to represent completely unacceptable risks on this project, and the matter of rarity is only a relative one. Since a major spill could occur, even though infrequently, it must be ruled an environmental impact of utmost consequence, without apology for rarity.

6. Land Subsidence

6 Finally, an impact type which appears to have been dismissed too lightly in the DEIS is that which results from land subsidence. It is touched on briefly in chapter 2, page 2-102, and in more detail in chapter 3, pages 3-24 and 3-25. In Arizona, we are primarily concerned with subsidence stemming from widespread pumping of groundwater for purposes of agricultural irrigation. This has been recognized in the DEIS, but the seriousness of the consequences has been underplayed.

In the paragraph at the top of page 3-25, a case was cited of a gas pipe section which upon inspection showed no ill effects from exposure to a small offset fissure. This was a poor example. In the first place, offsets of much greater magnitude occur. In some cases in the area in question, well pipes extend over seven feet in the air after the land around them has subsided. The ability of a 30 inch pipeline , filled with crude oil which greatly outweighs the natural gas for which it was designed, to withstand such stress without fracturing and spilling is debatable.

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SOUTHERN ARIZONA ENVIRONMENTAL COUNCIL

BOX 49044 TUCSON, ARIZONA 85717

SOHIO PipeLine DEIS

6. Land Subsidence (cont)

6 Another , perhaps more serious situation could depend on whether the direction of a sudden fissure is at right angles or parallel to the pipeline. If parallel, the pipe, with its heavy load of oil, could be left with little support, and a disastrous spill could ensue.

The U.S. Geological Survey has been conducting in-depth studies in the Picacho-Coolidge-Casa Grande district, and has identified tentatively specific hazardous locales. Two particularly vulnerable spots for for the proposed pipeline appear to be just north of Picacho Reservoir and in the vicinity of the Casa Grande Pumping Station.

The SAEC Executive Committee makes three recommendations on this subject:

a. That the BLM and applicant together confer with the USGS to obtain the most recent information.
b. That the pipaline be routed to bypass all subsidence hazards.
c. That no pumping station or refinery be considered in such a location.

The SAEC Executive Committee urges the BLM to make necessary changes in the DEIS to reflect our recommendations and comments. Thank you.

Sincerely,

Jerry Cannon
President

A Council of community organizations working together to improve public understanding of environmental problems.

RESPONSE

Comment #1

This alternative was discussed in the Trans-Alaska Pipeline System EIS and considered in the subsequent decision to use the route to Valdez. BLM does not believe any further discussion is needed.

Comment #2

Only those developments which are directly related to the proposed SOHIO crude oil transportation system are covered by this Environmental Statement. No definite plans are known for a refinery in Arizona at this time. Should such a development involve Federal lands or permits, an environmental analysis would be made when a proposal was submitted.

Comment #3

Section 1.2.3.1, Abandonment and Conversion of Gas Pipeline, has been revised to reflect this comment.

Comment #4

The surge tanks are located at Indio and Redington and are described in Section 1.2.3.2, under Service Tanks.

Comment #5

This comment was considered, but the existing statement was believed to be warranted.

Comment #6

The sections on subsidence and fissures were reanalyzed in light of available geologic and engineering data. BLM believes that the potential impacts from subsidence and fissures are minimal and no text changes are warranted.

Friday, December 17, 1976

Bureau of Land Management
U.S. Department of the Interior
SOHIO Environmental Impact Study Project
P.O. Box 660
Los Alamitos, Calif. 90720

Gentlemen:

This reply relative to study of the Environmental Impact Study on the SOHIO Alaskan Oil Project by your agency deals mainly with the effects and the environmental pressures could have on the north-central section of Long Beach.

1 I quote from your study: Chapter 3, Page 29 states: "Areas that have been identified as susceptible to liquefaction hazards include the Long Beach Port facilities, the portion of the pipeline that flanks the Los Angeles River, the Santa Ana River area, and the area in the vicinity of the Colorado River."--There is no mention of the fact which is documented in the Long Beach Safety Element, that the Hynes tank farm area and the Harding Street approach is the second worst area in Long Beach to be subject to liquefaction potential. Why was this "overlooked"?

2 It is stated on this same page of the study: "Earthquake-induced fires are another important secondary effect."--I agree, especially when two huge oil lines are traversing an area like Harding Street and cross streets that carry pipelines that under high pressure are transporting all types of dangerous petro-chemical products. These interlaced pipelines on these streets are transporting such devastating chemical materials as: naphtha (which boils at 36 degrees), gasoline, jet fuel and who knows what else. If these pipelines along with the huge Alaskan oil pipelines are ruptured by earthquakes, the fires that would ensue from the mixing of these chemical materials would cause a hell on earth for these innocent people and their children. Even earth-digging trenching equipment could rupture the present petro-chemical pipelines, and a huge loss of life and property could ensue just as it did in Los Angeles recently. Our hazards are great enough now, please don't add to them!

3 You state on Page 3-25: "Earthquakes can also ~~effect~~ affect the operation of support equipment which is intended to control or mitigate problems associated with failures in the system...For example, power or communication facilities intended to close valves, control fires that may result from earthquakes. Valves can be rendered inoperative."--With a mile and six-tenths of pipeline through a heavily populated residential area that exists on Harding Street, an area that could be subject to severe earthquakes and liquefaction and the hazards outlined in the preceding paragraph, would it be good judgement to install these two huge Alaskan oil lines? This pipeline will run through no other residential areas on its way to Midland, Texas. Why should we be especially favored with this gigantic hazard? KNXT-TV, Channel 2 reported early this month at 2:30 p.m. on a news-flash: "Land north of Los Angeles sinks six inches." --I believe a severe earthquake is imminent.

4 Nowhere can I find evidence that there have been any studies of the
3 Harding Street approach to the Hynes site or the Hynes site itself, par-

3 ticularly on type of soil and the effects of liquefaction in this area on the project. Just what is intended? Is it a simple ramrod approach regardless of the cost in human lives, health and property values of these residents? The rodents and the plants in the fields that this pipeline passes seem to getting more consideration than is human life. We say, if Hynes site is intended for use then a new and complete study is in order, otherwise our ecological interests will not have been addressed.

5 There is no reference to total weight of surge/storage tanks or how
4 and of what gage steel materials they will be built to withstand the 1-G of stress from earthquakes Dr. Paul Fritts said was necessary recently in this same board room. This we believe should have been an imperative segment of this EIS.

6. In Chapter 2, Page 2-85 your report warns about the Long Beach subsidence problem and states: "In the Long Beach area, continuous monitoring is required because the land surface responds quickly to subsidence pressure changes."--It appears to us that under these conditions of land instability and the constant withdrawal of oil deposits that this area is more vulnerable to heavy earthquake damage which could wreck the oil storage tanks, cause fires and heavy loss of life and property for the people of Long Beach. This project just has too many negative aspects to be approved.

7. On Page 2-259 you state: "Emissions in conjunction with topography and climate give rise to the worst photochemical air pollution in the nation."--This statement referred to Long Beach and is still another area of argument that should eliminate this oil project from Long Beach, which is becoming known as the city of the "black lung." This title being earned because of the concentration of petro-chemical industry and the pollution that it produces within this city or on its immediate borders.

On Page 2-260 your report admits that the area south of Los Angeles which includes Long Beach and Whittier has the highest concentrations of sulfur oxides in the country. Hydrocarbon measurement reportings for the Long Beach area were discontinued by the APCD in 1966. Why? The results of tests were high then. The APCD measurements were continued in the Los Angeles area, where the measurements declined. Long Beach, the home of the petro-chemical industry, needed surveillance, but lost this on hydrocarbon emissions in 1966. Why?

8 No report in your EIS was made on the potential noise problem during and after construction at Hynes of the surge/storage tanks etc. although in your preliminary draft, attention was paid to the residents who will be living within 50 feet of this racket. Severe impacts
5 will have to be absorbed by these people, and the report further states they will be vitally affected by pumping station equipment which will operate 24 hours a day. These residents' sleep will be disturbed. How do people exist without sleep? This area is already over-burdened with a high noise level from the presently situated petro-chemical industry, and this project wants to add more noise and pollution?

9 Your EIS did not deal with supertankers' potential for explosion in
6 our harbor, such as the incident that happened on Friday, Dec. 17, 1976

6 at 7:40 P.M. at San Pedro Berth 58. The probable cause is speculated to have been gas fumes built up within the supertanker Sansinena's tremendous holds for crude oil. These tankers are forbidden to purge these holds in port, due to the air pollution that this would cause for on-shore residents, but by retaining these gases for purging at sea the factor of hazard remains as long as the supertankers remain in port...They are literally time bombs under these circumstances...We hardly need this type of hazard coupled with the danger of earthquakes, and the devastation that ruptured or overturned storage tanks would provide for this town. This project does not belong here in Long Beach. On the same day of the Sansinena tragedy that took nine lives, another super tanker, the Argo Merchant, was breaking apart after running aground near Boston and it was spewing crude oil over the ocean and beaches in an ecologically dangerous way on and after Saturday, December 20, 1976. Another supertanker, the 974-foot ship that went aground here, blocked Angels Gate in Los Angeles Harbor. Do we not have enough cases of tragedy and potential tragedy for guidance here in Long Beach? It appears that we have. KNBC-TV reports that the Aggo Merchant just mentioned has had 18 mishaps at sea...

10. I have letters dated Oct. 21, 1976, Nov. 17, 1976 and Dec. 6, 1976 addressed to the Long Beach Building and Safety Department that ask for information on whether this department has conducted liquefaction and dynamic analysis tests as required by ordinance of the land that this project's storage/surge tanks would be built upon. This land has a 12-foot groundwater level. Tests are required if groundwater level is less than 50 feet. This city remains in a position of indifference to the safety and welfare of its residents. If no problem existed, I'm sure that I would have had a response by letter weeks ago. Our area also has been recognized as the most critical to fire hazard within the city, two more fire stations are projected in the Safety Element of the Planning Department. Why? I'm sure I do not have to elaborate on this. You can figure that one out without my assistance! We ask that our area not be further hazarded by the two huge Alaskan oil surge/storage tanks. Mr. Ivar Peterson of Long Beach Emergency Preparedness has written that my concerns are valid.

Frank H. Arundel, Chairman
Cherry Manor Area Homeowners Assn.
2268 East 63rd Street
Long Beach, Calif. 90805

c.c.: Secty. Sandra Hess
Congressman Bannaford
Atty. Zommick
City. Atty. Leonard Putnam
Senator Alan Cranston

P.S.: We now find that the high-pressure petro-chemical pipelines that interlace the Long Beach area above South Street are unguarded and have no emergency automatic shut-off valves. This pattern of lack of responsibility by this city's government must be changed to protect the people of our area in case of severe earthquake.

RESPONSE

Comment #1

The inland terminal will be at the Dominguez Hills site according to SOHIO. Therefore, neither the Hynes tank farm nor Harding Street will be involved in the project.

Comment #2

The discussions of earthquake hazards and related mitigating measures contained in Sections 3.1.3.3, 4.1.2, 4.2.2, 4.3.2 and 5.3 are believed to be adequate.

Comment #3

See response to Comment 1.

Comment #4

See response to Comment 1.

Comment #5

Use of Hynes as the site for the inland terminal is no longer being considered by SOHIO. If Hynes were used in emission trade-offs, dismantling noise (which is of limited duration) should be less than current noise from operating equipment near the site.

Comment #6

Section 3.1.17 has been expanded to include the impacts of a tanker explosion.

9.17.5 Individuals

January 4, 1977

Comments by:

Orme Lewis, Jr.
Natural Resource Consultant
4350 E. Camelback Rd., Suite 220-E
Phoenix, AZ 85018

Presented to:

SOHIO EIS Project
Bureau of Land Management
U.S. Department of Interior
Los Alamitos, CA 90720

Having been involved for the past several years in the considerations which will provide a new source of energy for the Southwest, I appear before you today to recommend revisions to the draft environmental impact statement. In particular, the final statement should discuss the impact of the development of a grass-roots petroleum refinery in connection with the SOHIO system.

In order to place the issues in better persoective to Arizona, recognition should be first given to the fact that 85% of the energy consumed in Arizona is produced out-of-state. This neither serves the best interest of the consumer or the industry. As was witnessed during the curtailment of natural gas and the allocation of other products, Arizona must provide an expanded energy base. The gravity of the demand for products is demonstrated by comparing the '74 consumption of 53 million barrels to the project consumotion of '76 of 64 million barrels.

1 With respect to the economic analysis pertaining to the subject EIS, may I suggest that broader consideration be given to the impact of the cost benefits resulting from the conversion of the system. Besides the transportation cost savings attributed to a more efficient system, analysis should be made of the benefits of providing distillate and residual fuels

1 on a more assured basis to utilities. Local utilities consumed about half of the 26 million barrels of such fuels imported into Arizona last year.

2 Equally important, the conversion of the El Paso line results in a duel benefit on ad valorum taxes: first, it would remove the system from the rate base of the gas distribution system, and second, it would substantially increase the assessed full cash value attributed to a fully utilized system.

3 The discussion of the national security and economic impact might well be broadened to include the advantages attributed to encouraging new and more diverse refining capacity in connection with the conversion and utilization of the SOHIO pipeline. It is in the national interest that the country's dependence be shifted from the 2.5 million barrels per day of refined products which are presently imnorted. A partial response to this grave oroblem is the creation of a more favorable environment for the development of grass-roots refineries, especially in areas proximate to growing markets. Such a development is important to Arizona because of the rate of growth and the need for more assured supplies for utilities and strategic defense installations. The development of a refinery in Arizona depends upon a known supply of crude and a suitable blend stock. Accordingly, the system should be designed and permitted to accommodate both domestic and foreign petroleum from sources other than Alaska. Neither Indonesian nor Mexican crude should be overlooked.

The ultimate capacity and use of the line becomes a critical issue when consideration is given to the demands for blend stocks in addition to the contemplated 500,000 barrels per day of Alaskan crude. Such a requirement may well necessitate additional docking, terminal and storage facilities as well as the expansion of compressor pumping stations and discharge

depots. Rather than deferring these important issues, it is urged that the final EIS and related economic analysis provide further discussion of the impact of new refining capacity which will be dependent on the character and cost of the thru-put in the SOHIO pipeline.

In order that a grass-roots refinery can be established as soon as possible in Arizona, it is critical that the EIS address several factors:

3
1. Broadening the scope of the permit to include the transportation and discharge at intermittent points of petroleum blends and products.
2. Increase the capacity of the terminal facilities and pumping stations to transport petroleum in excess of the contemplated 500,000 barrells per day day.
3. Reserve allocations of crude for Arizona in order to encourage the earlier development of a refinery.
4. Designate "reaches" within the system in which discharge terminals would create the minimum harm to the environment.
5. Provide a general overview of the circumstantes in which a refinery in Arizona would be dependent upon the SOHIO system.

THEREFORE, I urge that the final EIS oroperly assess the impact of issuing permits which will afford the opportunity to more quickly develop a grass-roots refinery. It has become apparent that it is in the local, regional and national interest that the pipeline not oreclude, but encourage the early advent of a refinery which can mitigate the increasing dependence of Arizona and the United States on foreign products.

RESPONSE

Comment #1

Discussions of these types of economic benefits are outside the scope of this analysis of environmental impacts of the proposed crude oil transportation system from Valdez, Alaska, to Midland, Texas.

Comment #2

No discussion of these points in the text is considered to be warranted since conversion of the gas pipeline is expected to have little or no effect on local tax structures.

Comment #3

Possible future developments such as an Arizona refinery would be dependent on local supply and demand considerations. Because no firm plans currently exist, a discussion of impacts on such hypothetical developments is considered outside the scope of this project.

Jan. 8 1977

To the Project Manager:

I have read the SOHIO company's plan for pumping crude oil through natural gas pipelines from Long Beach to Midland, Texas. In evaluating the environmental impact of this plan, one must assume that the worst possible accidents will occur, and plan for them. Besides considering 'natural' accidents one must also assume deliberate fraud (as the concealment of faulty welds on the Alaska pipeline).

Not being an engineer, I cannot evaluate the strength of existing pipes for this new function or the soil types and faults over which the line must pass. My main concern is with the siting of the line: it must be as close as possible to existing roads so that the inevitable repairs can be made quickly. Also, it would not be right for your agency, as guardians of public land, to be forced to allow pipeline repair or construction to damage any of the roadless areas. Therefore, I urge that these changes be made in existing and proposed pipeline routes in Arizona: between Ehrenberg and Gila stations, the lines should closely parallel US 10 as far as Old State Route 80, turn south there and follow that road to US 8 and thence to Casa Grande Station. This would avoid the unjustifiable cutting through the desert between the Kofa and Plomosa Mountains. East of the Plomosas, the Hope station should be in the utility and transportation corridor of US 10: it should not be sited so close to the rugged Eagletail Mountains. For the same reason, the pipeline should be re-routed between Cochise and Cochise stations to follow State Hiway 80, county road 77, ranch roads to the south of Redington and over Allen Flat rather than through the Winchester Mountains. The final portion should follow US 10 from Bowie to Lordsburg and not cut through the Peloncillo Mtns.

It is important to note that the maps used by Williams Bros. Engineering Co. in the plan's "System atlas" are quite out of date regarding the completed interstate: a look at a current map shows that US 10, old state Route 80, and US 8 form a corridor through this region. There is no reason to disrupt desert lands with new construction and electric wires when the utility and transport corridors already exist.

These changes in the "existing" pipeline may seem extreme, but one must remember that a natural gas line and a crude oil line deal with different cargoes and must be treated differently. Also, the narrower gas pipe will probably be replaced by wider oil pipe so there will eventually be a lot of construction, either piecemeal or all at once. But the environmental impact must not be dealt with on a piecemeal basis. This project is not a simple substitution of one commodity for another in the pipes — the commodities are too different — an oil spill is not comparable with a gas leak. Therefore the BLM must insist that the pipeline be routed through land which has already been developed, and which will provide quick access to the pipeline in case of accidents.

Barbara H. Coon
2900 E. Seneca
Tucson
AZ 85716

RESPONSE

Comment #1

It is shown in Chapter 3 (impacts) and Chapter 8 (all-new construction alternative) of the FES that utilization of the existing gas pipeline will generally result in less environmental damage than new oil pipeline construction.

Comment #2

The maps used are the most current topographic maps at uniform scale available; more current highway maps lack topography which was considered essential to various environmental factors. However, existing highway routes were considered in the analysis.

Comment #3

Chapter 1 describes the technical process of converting the gas pipeline to accommodate transporting oil. Chapter 3 discusses the impacts of this conversion and the operation of an oil pipeline. No additional future construction activities are proposed as part of this conversion process.

STEPHEN MILJEVICH
15106 Gard Avenue
Norwalk, California 90650

January 21, 1977

Project Manager
U. S. Bureau of Lann Management
P. O. Box 660
Los Alamitos, California 90720

Dear Sir:

In ragerd to the Sohio proposal, aetting aaide the controvaraial objactions which ara of an unpraoictable natura such as earthquaka and ahip collision factora, thara ramaine the one cartain or undaairable affect; that of further pollution of the air of the Loa Angalaa Air Basin.

The Sohio project could ba modified to raduca tha amiaaiona to naar zaro (outaida of accidant from eartnquaka and ahip collision) by adding two conditiona bafore permiaaion to procaea with tha project ia grantad.

1 1. Complata prevention of amiaaiona from atorage tanka. I believe a method of aealing the floating roof of a atorage tank can ba made both tachnically and economically feaaibla.

2 2. The construction of branch oil pipelinea, connecting with existing or proposed pipelinaa, to a point north of tha mountaina aurrounding tha Loa Angalea Air Basin. Or alternataly tapping into tha line going aaet in an araa outaida tha Loa Angalea Air Basin. Any expanaion, therefore, of oil rafineriea and aspecially the aatablishment of plastic or patro-chemical planta ana alao the expanaion of oil fuelad power planta could take place outaina of tha Loa Angelaa Air Basin.

Aa for trada-offa, any concern for tha increaaed coat oi building branch linea would be balanced by a reduction in air pollution - with a concern for tha health of tha population of the basin.

For too long the air in the basin haa been increaaingly polluted. It is time ao not only atop the increaaa, but to reveraa it.

Reapectfully youra,

Stephen Miljevich

RESPONSE

Comment #1

Safe, zero-emission equipment is not now "on the shelf." BLM has not suggested such a mitigating measure because development time is uncertain.

Comment #2

The DES and FES assume no expansion of refinery capacity resulting from the project. See Section 3.1.16.5, Energy Supply and Demand.

332 Morro Bay Blvd.
Morro Bay, Cal, 93442
January 17, 1977

Project Manager
Bureau of Land Mangement
P.O. Box 660
Los Alamitos, Cal, 90720

re: SOHIO Faderal Draft
Environmental Statement

Dear Sir,

1 I find tha EIS for tha SOHIO supertanker proposal to ba satisfactory except for its offhand mantion of tha alternative sights on the Cantral Coast.

Any datrimental affacts in Long Bach will also be harmful hera only in a greater sense, as this area is not industrializad. People have livad here for yaars and of late are moving into tha area in greater numbers to get away from such operations. So many spots up and down the coast have baen tarnishad by our 'need' for oil or our 'naed' for industry. I plaad that tha Central Coast be dropped for considaration and laft for our 'need' for a clean anvironment.

Tha harbor facilities in Long Bach, tha easy accass to relatad equipment and tha spaed of claanup at tima of spill or accident point up thrae reasons that araa is more suitable. Tha fact that Long Bach offers assistanca both in arrangements and in finances should also ba considared a plus. A long difficult battle, rather than cooperation, may be on hand hera on tha Central Coast. I, for ona, am ready to join that fight if it comes.

Apprehensively,

Jane Orvis

Jane Orvis

RESPONSE

Comment #1

Section 8.2.2.2 has been expanded in the FES to clarify the potential impacts associated with these alternative port sites.

Harry L. Silcocks
1143 Lambaren Ave.
Livermore, Ca 94550
December 23, 1976

Project Manager
Bureau of Land Management
EIS Project Office
P. O. Box 660
Los Alamitos, Ca. 90720

Dear Sir:

I would at this time like to comment on the draft EIS "Crude Oil Transportation System: Valdez, Alaska to Midland, Texas".

1 Is it possible to use equipment that would "capture" from the unloading operations (venting) and those purging operations that might be conducted within the harbor area, thereby preventing these vapors from entering the atmosphere?

Is it possible to use an inert gas during the unloading operations to prevent the possibility of an explosion?

Is it possible to require that only those tankers that use segregated ballest be used?

If it is possible to use equipment that will capture the vapors from unloading and cleaning operations, can the use of such equipment be required?

2 In regard to the route the tankers will use, it would seem that it would be in the best interests of the shore environment to require that the tankers remain as far off shore as possible for as long as possible. Can the Coast Guard require the tankers to follow a specific route. If so has the Coast Guard considered this possibility. It is to be remembered that an error in navigation of 17 miles has resulted in the worst oil spill in the United States. These errors must be considered in this EIS.

1 While the oil from Alaska should remain in the United States, it would seem that SOHIO could as should be required to develop the ability to contain vapors from the unloading, cleaning and ballasting in such a manner that the amount of vapors released into the atmosphere would be insignificant.

(2)

It would also appear that the protection of the shore environment is of such importance that the route taken by the tankers should be as far from the shore as possible until the final turn is made. The only purpose in route selection should be environmental protection. The best route is that route that best protects the environment.

3 Sea otters can not tolerate any oil contamination whatsoever, therefor to insure their protection from an oil spill, tankers should be required to maintain a distance from shore that would insure that the oil would not reach their environment. Can this be made a part of the permit?

SOHIO should realize that there are many concerned persons who know that the oil from Alaska must be brought into the continental United States. These same individuals also desire to bring the oil to the continental United States in a manner that will protect the environment. Its not that they are against it, its that they also wantenvironmental protection.

4 I also expect to see a complete and honest evaluation of the explosion of the tanker Sansinema.

sincerely yours,

Harry L. Silcocks

RESPONSE

Comment #1

Sections 4.2.2 and 4.3.2, under Port Area, have been revised and expanded to reflect these tanker equipment and operation concerns.

Comment #2

Tanker routing has been addressed in Appendix A1.1.1.1-A, Tanker Traffic Study. Specific routes can be required where specific or significant navigation hazards are present.

Comment #3

Between Monterey Bay and San Luis Obispo Bay, the primary range of the California sea otter, the SOHIO fleet will be at least 50 miles offshore. Studies cited in Section 3.1.5.1.2, under Oil Spill Trajectory, state that oil spill impacts to these coastal areas are considered remote because of the tanker distances from shore and the projected spill life of the oil.

Comment #4

The impacts of a tanker explosion are discussed in Section 3.1.17.

January 5, 1977

Comments before the
PUBLIC HEARING, Los Angeles, Calif.
Draft Environmental Impact Statement for the
crude oil transportation system from Valdez,
Alaska to Midland, Texas as proposed by
SOHIO Transportation Company

Good afternoon Mr. Chairman. My name is Frank Slaton, and I reside at 931 South Eureka Street, Redlands. I own property in the Smiley Heights area of Redlands - specifically tract 9352 - the tract closest to the proposed Redlands pump station. I represent over two-thirds of the property owners in the residential area. The quiet enjoyment of our homes, and the very value of our choice residential property is threatened by the introduction of an unwarranted noise source.

I am not expressing a general opposition to the pipeline. My interest is limited to the Redlands Pump Station. My specific concern is the noise during operations.

Maps in the Draft Environmental Impact Statement clearly identify the proposed location of the Redlands Pump Station as adjacent to developed residential property. It says the distance to the Redlands Community Hospital is 1,500 feet. My property is even closer.

The report recognizes that there may be some degree of annoyance and complaints due to the change in noise levels at the Redlands Pump Station. Quoting: ..."(Pump) station operation would be clearly heard at those receptors at distances of 2,000 to 3,000 feet and even greater, when daily background noise levels are lowest (generally at night and early mourning) ..."

1 I recognize that acoustical barriers are a possible solution. I would like to offer a better alternative - move the pump station at least five miles east. This would move it to open space, and the new location is within the eleven mile length of new pipe being laid.

Thank you.

Frank T. Slaton
931 South Eureka Street
Redlands, California
(714) 792-2078

The following property owners have notified me in writing that they agree with my comments and concur in my proposed solution:

R. E. Cedergren
1500 Serpentine Dr.

William E. Cunningham
1112 San Jacinto

Wilmer J. Engevik
Cypress at Nottingham

Jeannette M. Finch
P.O. Box 1192

David L. Goodwin
991 Pine Avenue

Joseph E. Hearn
1542 Serpentine Drive

Arthur M. Jensen
1349 Pine Knoll Crest

O. W. Krest
1504 Serpentine Drive

Dr. Donald E. Newnham
1346 Pine Knoll Crest

Hugo Riffel
1561 Smiley Heights Drive

Philip M. Schott
1206 Cedar Avenue

Vance H. Taylor
1347 Pine Knoll Crest

Betty Voss
12100 San Timiteo Canyon Rd.

All addresses - Redlands California 92373

RESPONSE

Comment #1

A mitigating measure to move the Redlands Pump Station to the west was explored, but no commitment for such a measure was obtained from any concerned permitting agency. In Section 4.2.3 a mitigating measure to reduce visual and noise impacts at the proposed site is discussed.

January 4, 1976

Project Manager
Bureau of Land Management
Box 660
Los Alamitos, California 90720

Sir:

Subject: Draft Environmental Statement
Standard Oil of Ohio (Sohio) project

I have read in the local newspaper the notification regarding public hearings on the above project, and solicitation of comments.

I do not have a copy of the draft environmental statement and therefore am not able to comment meaningfully on it, however, my concern is that the possibility of locating a distribution platform off the Guadalupe Dune area has been reported in the local media, and I wish to urge that if this type of a proposal is indicated as an alternative then a thorough environmental study will be necessary in order to evaluate the impacts of such a project on the local area.

1 The local media has reported on visits to the Guadalupe dune area by various officials. Some of the conclusions that have been reported are erroneous; primarily, I must point out that the prevailing winds in this area are landward, rather than seaward, as one official had concluded, and any air pollution would in fact be brought over the land by the prevailing winds and would have a detrimental effect upon the air quality of the Santa Maria Valley.

Thank you for the opportunity to comment.

Yours truly,

LaVonne McGee
(Mrs.) LaVonne McGee
1856 Wade Court
Santa Maria, California 93454

RESPONSE

Comment #1

Sections 8.0.2 and 8.2.5.1 have been expanded to discuss Guadalupe Dunes and other central coast port alternatives. The sections include discussion of potential air quality impacts.

9.17.6 Applicant and Applicant's Representatives

El Paso NATURAL GAS COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE 915-543-2600

January 10, 1977

Mr. Charles R. Tulloss
Project Manager
Bureau of Land Management
EIS Project Office
P. O. Box 660
Los Alamitos, California 90720

Reference: SOHIO Crude Oil Transportation System
Comments on the Draft Environmental Impact Statement

Dear Mr. Tulloss:

El Paso Natural Gas Company (El Paso) has reviewed the eight volume draft environmental impact statement (DEIS) on the Crude Oil Transportation System: Valdez, Alaska to Midland, Texas (As Proposed by SOHIO Transportation Company). Based upon this detail review, El Paso has the following comments to offer on this DEIS.

GENERAL COMMENTS

1 El Paso Natural Gas Company (El Paso) believes that the Bureau of Land Management's Draft Environmental Impact Statement (DEIS) represents a careful, thorough analysis of the baseline environment through which the proposed SOHIO Crude Oil Transportation System will traverse, the potential impacts that the proposed system will have on that baseline and the effectiveness of the proposed mitigating measures to minimize those impacts. However, additional analysis could be included on the probability of any of the potential impacts actually existing. El Paso believes that this would provide the reader with the best mechanism for assessing the likelihood that any of the projected impacts would be significant.

2 It is also evident that SOHIO's Oil Spill Contingency Plan (OSCP) for the proposed project was not utilized in analyzing potential oil spill impacts and related mitigation measures. As a result of this situation, many possible oil spill impacts were stated as potentially significant when if the OSCP is considered these impacts may not occur at all or be substantially mitigated. Accordingly, El Paso suggests that the Final Environmental Impact Statement (FEIS) reflect the fact that an OSCP will be developed and that the plan when implemented will mitigate the impacts resulting from an oil spill.

EXECUTIVE SUMMARY

Page I-1, line 6

Should read as follows: ". . . crude oil *produced* from . . ."

Page I-2, 1st paragraph, line 3

Insert ". . . new *power* transmission. . ."

Page I-2, 1st paragraph, line 8

There is no mention of conversion in Texas.

Page I-6, 1st paragraph, line 9

". . . without additional pumps." should be changed to "*without additional pump capacity.*"

Page III-8, 1st full paragraph

Because of the use of an existing El Paso pipeline in the proposed oil transportation system, there will be minimal need for further soil compaction east of the Colorado River.

Some perspective regarding the magnitude of all referenced impacts is necessary.

Page III-8, 3rd paragraph

The discussion of the discharge of water used during hydrostatic testing appears to be inconsistent with the Project Description, page I-110.

CHAPTER 1 - DESCRIPTION OF THE PROPOSAL

Page 1-2, 3rd full paragraph

3 The total length of the line as reflected here is 1,026 miles; the length as shown on Figure 1 is 1,013 miles. The correct length is 1,026 miles.

Page 1-2, 4th paragraph

4 The length of new pipeline will be approximately 106 miles.

The length of existing pipeline is approximately 592 miles.

Page 1-3, 2nd paragraph

5 The following paragraph would clarify that the new pipeline built under this project could handle a 1,000,000 bbl/d throughput for the proposed system.

The proposed system could be expanded to accommodate larger crude oil volumes in the event a greater crude surplus develops on the West Coast. New construction to complete the proposed pipeline system between the terminals will use 42" diameter pipe. The natural gas pipeline presently proposed for abandonment and conversion for use in this system is comprised of 30" diameter pipe. The 30" diameter pipe restricts flow to approximately 500,000 bbl/d. It is possible that a second natural gas line could be made available in the early 1980's as a result of continuing decline in Permian Basin gas production. Therefore the use of 42" diameter pipeline where new construction is now required will allow possible expansion of the system to 1.0 MMBBL/d if and when a second 30" natural gas pipeline is made available. It should be recognized that additional permits would be required for such expansion.

Page 1-15, 3rd paragraph, line 6

6 Clarify wording to reflect utilization of the existing natural gas pipeline. The implication on line 6 is that utilization would be incomplete. Furthermore, the two-mile section through the Guadalupe Pass should be rewritten to clarify the planned activities in this area.

Page 1-42, Table 1.2.3.1-1

7 With respect to El Paso lines being converted, a footnote should be added stating "*Segments of several different lines are used to collectively make a 667.3 mile pipeline in Arizona, New Mexico, and Texas.*"

8 Line No. 1600 was installed in 1969 and 1970, not 1960 to 1970.

Page 1-43, 1st paragraph

9 The discussion about a bypass pipeline around each compressor station facility needs to be clarified and updated to the proper project description.

Eleven of twelve existing compressor stations will no longer have an oil line bypass of the station. The oil line will pass through each of the eleven stations.

Page 1-43, 2nd paragraph

10 A compressor unit at Cornudas compressor station is no longer scheduled for abandonment. Instead, the El Paso "C" compressor station will be abandoned.

Page 1-110, 2nd paragraph under "Testing"

11 In the second line, after freshwater, add: *then increasing the pressure by means of a special pump.* The second sentence should be qualified in that the 1.25 refers to the field and a 1.50 would apply within the station limits.

12 In the next paragraph the second sentence does not agree with the first sentence of last paragraph on page 1-74.

Page 1-110, 3rd paragraph

13 Filling the pipeline with water alone does not pressurize the line during the Hydro-test. Insert *and pressurizing the test section, until* after "freshwater."

Page 1-111, 2nd paragraph

14 The sentence, "We assume that the hydrostatic testing will be performed on sections 5 miles long (30" diameter pipe)" would fit better after the colon.

Page 1-132, next to last paragraph

15 SOHIO will not be responsible for salvage of the entire pipeline system. SOHIO will lease the existing El Paso pipeline from Coronado Pipeline Company. Upon termination of operation of the pipeline facilities east of California, those portions of the existing pipeline will revert to the Coronado Pipeline Company, who will then be responsible for any further use of the pipeline or for appropriate salvageabe activities at that point in time.

CHAPTER 2 - DESCRIPTION OF THE ENVIRONMENT

Page 2-9, 1st paragraph

16 There is an apparent typo in the description of January temperatures in Southern California.

Pages 2-29 through 2-33

17 The ecosystem definition in this section is too long and should be shortened.

Page 2-33

18 The first paragraph assumes too broad an ecosystem definition since ecosystems must be encompassing enough to include a closed nutrient cycle. It is suggested that ecosystems be limited to the major biomes with the inclusion of one additional biome comprised of permanently man-altered conditions instead of including all those which are actually transitory in ecological time.

Page 2-36, 1st paragraph

19 The discussion of the Gila Woodpecker is an exception, not an example, of plant community structure regulating animal community structure. The theory rests upon animal community structure being independent (an oversimplification) of plant species composition.

20 The terrestrial ecosystem section is very patchy and should be reworked to give a smoother flow of the ideas presented.

Pages 2-38 through 2-41, Aquatic Ecosystems

21 There is no discussion of the ecological interrelationships of rivers or freshwater habitats that are encountered other than the Colorado River. A general discussion of a "typical arid river" is needed since the Colorado River is rather unique when compared to other freshwater habitats encountered.

22 A general discussion in the ecosystem section of the current level of major man-related impacts is recommended.

Pages 2-644 and 2-645

23 On page 2-644 it is stated that there are six major biomes, while on page 2-645 it is stated that there are eight major biomes.

Page 2-661, 1st paragraph

24 "...feeding sites" should be "*breeding* sites."

Page 2-676

25 The Willcox Playa, Sulphur Springs Valley and San Simon Valley are so far removed from the pipeline route that they should not be included in the baseline discussion. Secondly, what is the elevation differential between critical habitat in these areas and the pipeline? If they are at a higher elevation, the possibility of impact due to an oil spill is remote. Therefore inclusion for this purpose appears unnecessary.

Page 2-683

26 The shad most commonly caught in the Pecos River, based upon sampling conducted by Sublette, 1975, is the gizzard shad, *Dorosoma cepedianum*.

Page 2-696

27 The Pecos pupfish, *Cyprinodon* sp. has been collected at the existing El Paso crossing of the Pecos River by Sublette in 1975.

Pages 2-695 through 2-721

28 Since species with current federal status have already been discussed on pages 2-690 through 2-695, references to obsolete federal status in this section should be deleted.

CHAPTER 3 - ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

29 This chapter contains a detailed discussion of the potential environmental impacts of the proposed action, with most topic areas containing substantial information. Potential impacts are well-identified, but the probability of their occurrence and their significance are overstated by the presentation of examples utilizing the "worst-case concept". Nowhere in the entire assessment of impacts has an attempt been made to identify positive benefits of the proposed project. The impact section seriously neglects the possibility of trade-offs in terms of positive aspects of displacing foreign imported crude by domestic crude. As a consequence, all the environmental impacts of the proposed action are reported as negative.

Page 3-1, 2nd paragraph

30 "...without specific plans and procedures being finalized, severity of worst case increases."

Comment: Specific plans referred to are never finalized at this stage of a project. By definition, a "worst-case" would be the case where specific plans were non-existent or totally ineffective. Thus, the severity of a worst-case cannot be worsened by the plans not being finalized.

Pages 3-1 to 3-2, "Summary..."

31 The three principal categories of impacts are succinctly identified as air quality in the Los Angeles Basin, oil spills, and aesthetic impacts of power lines. They should be put in perspective in terms of relative severity and probability of occurrence. Elsewhere, there is a clear statement that serious air quality problems or oil spills will be events with a low frequency of occurrence (e.g. on page 3-126). El Paso concurs with this conclusion and believes

31 that it should be made very early in the Summary in order for the reader to place in perspective the discussion of the impacts of the proposed action.

Page 3-3, 1st paragraph, line 9

32 The speculation that oil from an isolated oil spill could reach the Willcox Playa is a major misconception. The distance from the existing buried pipeline to Willcox Playa is approximately 10 miles. This area is extremely flat and level terrain with no channelization. It is inconceivable that an oil spill would be both large enough and extensive enough to result in oil reaching Willcox Playa.

Page 3-2, End of line 9

33 A statement should be made that SOHIO has committed to trading off existing emissions so that there will be an overall beneficial air quality impact through the implementation of the proposed project.

Page 3-2, 2nd paragraph

34 Although major impact is attributed to accidental oil spill, no mention is made of the oil spill contingency plan which is in preparation and required for operation of the project.

Page 3-6, top

35 The transition to Year 2000, the discussion of impacts expected and the relationship of this paragraph to those following should be clarified. It should be clearly stated what is intended by the heading Year 2000 and the discussion that follows. Parallel format appears on pages 3-13, 3-31, 3-90 and elsewhere.

Page 3-7, 1st paragraph, 1st sentence

36 Crude oil spills are not considered to be "routine". Any oil spill must be considered accidental.

Page 3-13, last paragraph, line 2

37 The "drastically altered" aspects of man's activities on natural vegetation, wildlife, and ecosystem relationships should be qualified with respect to location. These situations only occur in California and in urban areas where numerous construction projects have occurred in a localized area. A more reasonable approach would be to qualify the judgment in other areas with respect to what impacts have occurred. The existing pipeline from Ehrenberg, Arizona to Jal, New Mexico has certainly not "drastically altered" the natural vegetation, wildlife, or ecosystem relationships.

Page 3-20, last paragraph, line 3

38 No major construction is planned in the Guadalupe Mountains.

Page 3-21, Subsection 3.1.3.3.1

39 Subsection and title "Marine and Port" appears to be out of place. It should be inserted directly under 3.1.3.3 since the paragraph presently under 3.1.3.3 deals only with the Marine facilities.

Page 3-23, 1st paragraph, lines 2 and 3

40 There will be no construction in the Guadalupe Mountains. Therefore blasting should not occur and hence the landslides discussion is inaccurate.

Page 3-29, lines 2 through 4, 2nd paragraph under Secondary Ground Failure

41 The probability of earthquakes occurring east of California should be stated.

Page 3-30, 1st paragraph

42 The potential for liquefaction along the two segments of the pipeline should be discussed with respect to past history.

Page 3-35, 3rd full paragraph

43 Land clearing at the Ehrenberg pump station will occur on less than 6 acres with no construction activity expected on the remaining 4 acres. Therefore, only 6 acres of soil will be disturbed at this location.

Pages 3-39 through 3-40

44 The discussion on soil impacts does not reveal that the pipeline from Ehrenberg to Jal already has a maintenance road which will continue to be utilized by El Paso for maintenance of other pipeline not involved in the proposed action.

Page 3-40, 2nd paragraph

45 Approximately 5 to 6 acres at each pump station will be disturbed, not 10 acres.

Page 3-55, 2nd paragraph

46 It is unclear how the 2.3 accidents per year rate was calculated--apparently the total figures in Table 3.1.5.1.2-2 were summed and

46 divided by 10 years. The meaningfulness of the 2.3 rate is questioned as a mathematical manipulation having no basis in reality.

Page 3-169, 1st paragraph

47 There was more to the analysis of endangered species and their range than a simple comparison of habitats crossed by the pipeline. Refer to those specific sections in the West Coast/Mid-Continent Pipeline Project Environmental Impact Assessment submitted by the Applicant.

Page 3-169, 2nd paragraph

48 There will be a total of approximately 40 miles of construction in Arizona. The additional 34 miles will be between Livingston pump station and Gila pump station.

Page 3-249, 2nd full paragraph, lines 1 through 5

49 These five lines need careful clarification. It is doubtful that the corridor bisects the most important site for bighorn sheep in the entire Dome Rock Mountain system. The most important area is further south of the corridor. There are conflicts when references are made back to pages 3-3, line 3 and 4 and pages 3-239 and 3-240.

Page 3-249, 2nd full paragraph, lines 15 through 18

49 The text states:

"In the Yuman Desert Biome, the existing pipeline route passes through the Dome Rock Mountains, one of the best bighorn sheep habitats in the state. In fact, the corridor bisects the most important site for bighorn sheep in the entire Dome Rock Mountain system."

This conflicts with the text on page 3-239, which states:

"New pipeline construction through the Kofa Game Range (Figure 2.1.8.2-2) would have minimal impact on bighorn sheep. The major bighorn sheep concentration in the Kofa Game Range is to the south of the proposed pipeline route in the Kofa and Castle Dome Mountains...The only sheep found inside the Kofa refuge near the proposed route is an occasional migrant moving from one range to the other."

What the DEIS states as occurring near the existing pipeline and what it implies about the possibility of impacts upon the bighorn sheep is confusing. The distinction between the importance of Kofa Game Range and the Dome Rock Mountains for bighorn sheep and the specific area impacted by the project should be analyzed.

Page 3-278, last paragraph

50 It is stated that the existing El Paso pipeline will be utilized from Beaumont to Indio. That should read *Southern California Gas Company* pipeline instead.

Page 3-298, 3rd paragraph

51 The Anthony compressor station mentioned does not exist.

Page 3-299, 2nd paragraph

52 The area in which the Guadalupe pump station site is proposed presently has an oil pipeline, gas pipeline, and a highway passing through it. Therefore the discussion of the impact upon the visibility zone seems overstated.

Page 3-301

53 Pipeline inspection and maintenance checks already occur along the existing pipeline right-of-way. Therefore, no significant additional impacts should be experienced.

Page 3-308, Table 3.1.11.2.1-1

54 Since the highway adjacent to the roadside rest area located near the proposed Ehrenberg pump station site is a main artery for traffic and trucking, it seems that construction at the site would have minimal impact at the rest area when compared to highway noise which is almost as loud. The Ehrenberg pump station should be omitted from the list of areas which are noise sensitive.

Page 3-391, 1st paragraph, lines 4 and 5

55 Modify to read: "Table 3.1.16.5-4 shows existing supplies *available to* El Paso Natural Gas have..."

Page 3-391, 1st paragraph, lines 6, 7, and 8

56 Modify to read: "removal of the 30-inch line from service would *not affect El Paso's ability to transport and deliver such gas supply volumes* to the Southern California gas system *or other of El Paso's customers.*

Page 3-391, 1st paragraph, lines 8 through 11

57 Modify to read: "the combined El Paso and Transwestern pipeline throughput to Southern California at Blythe, *Topock* and Needles has

57 dropped from original contract volumes of 2.5 billion *cubic feet per day1/* to an average of 2.1 billion cubic feet per day (cf/d) for 1975."

Page 3-392, Table 3.1.16.5-4

58 Table 3.1.16.5-4 reflects peak day gas supplies for the 1976-77 through 1980-81 heating seasons instead of average daily supplies as shown for the period 1973 to 1977. A revision of Table 3.1.16.5-4 reflecting the correct display of such data is attached at the end of the comments to this chapter.

Page 3-392, 1st paragraph, lines 3 through 5

59 Modify to read: "Current environment and gas supply conditions leave little doubt that the line could be removed from service today with minor effect *on the amount of gas available from El Paso for delivery to Southern California, or other customers of El Paso. This is evidenced by the following factors:"*

Page 3-392, Item 1

60 Modify consistent with Table 3.1.16.5-4 (as revised) to read: "On a straight throughput basis, the available El Paso/Transwestern supply in *1978 (2.32* billion cf/d) is less than the *combined* capacity of the El Paso/Transwestern System (*2.8* billion cf/d)..."

Page 3-393, Item 3, lines 3 through 5

61 Modify to read: "cf/d of summer gas from the Permian Basin area. *Although the Federal Power Commission (FPC) has dismissed the proposal until such time as federal agencies can establish a national policy on these issues,* such volume *if approved* could, *under current load patterns,* still be accommodated with the El Paso 30-inch line abandoned."

Page 3-393, 1st paragraph, 1st sentence

62 Modify to read: "The immediate short-term effect on the southern California *and other El Paso customers* gas supply and distribution appears to be one of no impact as claimed by SOHIO and El Paso Natural Gas."

1/ The 2.5 Bcf/d contract volume reflects El Paso's capacity of 1.21 Bcf/d at Blythe and 0.54 Bcf/d at Topock, and Transwestern's capacity of 0.750 Bcf/d at Topock.

Page 3-393, 2nd paragraph, lines 4 and 5

63 Modify to read: "state that the pipeline abandonment would have no impact on *El Paso's capability to deliver all reasonably forecasted gas supplies to California and other customers served by the El Paso interstate transmission system."*

Pages 3-395 and 3-396, Tables 3.1.16.5-5 and 3.1.16.5-6

Permian Basin Sources

64 Average daily gas supplies from the Permian Basin shown on Table 3.1.16.5-5 (a copy of which is attached) were derived by averaging peak day gas supplies as contained in Exhibit 6 of El Paso evidence before the FPC at Docket No. CP75-362. Exhibit 6 reflects peak day gas supplies out of the Permian Basin for the period January, 1977 through January, 1983, and is based upon El Paso's gas supply projections as contained in its 1974 Form 15 report to the FPC. A more recent projection of El Paso's peak day gas supply was filed with the FPC as Exhibit 12 (a copy of which is attached), and is based upon El Paso's 1975 Form 15 report to the FPC. Table 3.1.16.5-5 should consider the revised gas supply projection from Exhibit 12.

Average daily gas supplies from the Permian Basin shown on Table 3.1.16.5-6 are based upon gas supply projections in Exhibit 8 of El Paso evidence before the Federal Power Commission at Docket No. CP75-362. The gas supply volumes shown were calculated in accordance with the procedures set forth in Tables A and B of the attached letter from Environmental Research and Technology, Inc., October 15, 1976, but do not reflect deductions for field fuel and shrinkage, gas lost or unaccounted and field sales.

Schedule 7 from Exhibit 40 (a copy of which is attached), of El Paso evidence before the Federal Power Commission at Docket No. CP75-362 reflects appropriate deductions for field fuel and shrinkage, gas lost or unaccounted and field sales assuming the same raw gas supplies underlying Table 3.1.16.5-6. As shown on Schedule 7 of Exhibit 40, field fuel and shrinkage, gas lost and unaccounted and field sales volumes reduce raw gas supplies from the Permian Basin to the El Paso mainline by some 13 to 17 percent. Such percentages should be applied to reduce raw gas volumes shown in Table 3.1.16.5-6 to obtain the volumetric levels El Paso's main transmission lines would actually receive from the Permian Basin under those supply assumptions.

Recent evidence filed with the FPC by El Paso as Exhibit 48 (a copy of which is attached) and denominated Case 1X(B) updates the gas supply projections underlying Exhibit 40. Such gas supply projections should be considered in Table 3.1.16.5-6.

64 Algeria II

The Algeria II project has been restricted. The project as now contemplated would make available to El Paso an average daily volume of approximately 618 MMcf/d. Previously, El Paso anticipated receiving an estimated 400 MMcf/d from this project, as reflected in Tables 3.1.16.5-5 and 3.1.16.5-6. El Paso now contemplates that full deliveries from the restructured project will be available during the 1983-84 winter heating season. Tables 3.1.16.5-5 and 3.1.16.5-6 should consider the changed volume and timing for this project. Revised Tables 3.1.16.5-5 and 3.1.16.5-6 reflecting these changes are attached.

CHAPTER 4 - MITIGATING MEASURES

Since El Paso is not the applicant in this proposed action, it would be inappropriate for El Paso to comment on each specific mitigation measure proposed by the Bureau of Land Management for implementation by the applicant. However, a detailed review of Chapter 4 requires the following general comments:

65 1. Certain of the proposed mitigation measures (e.g., relocation of specific pump stations) fails to take into account the hydraulic design requirements of the pipeline. It is submitted that pipeline design involves factoring of many considerations in addition to visual impacts and in El Paso's opinion the applicant has taken these many factors into account prior to selection of pump station locations.

66 2. All of the proposed mitigation measures for open space values and aesthetics appear to be overdone and are far too restrictive.

El Paso has forwarded an identical set of comments to Mr. Kenneth F. Plumb, Secretary, Federal Power Commission, pursuant to his notice of November 22, 1976.

Thank you for the opportunity to comment on the DEIS. If you have any questions concerning these comments, we will be happy to discuss them with you.

Very truly yours,

John M. Craig
Director,
Environmental Affairs

JMC/clc

RESPONSE

Comment #1

Throughout the text it was attempted to use the best available quantifiable data relating to impacts. In some cases, such as tanker oil spills, the probabilities of impacts were calculated. However, for many impacts probabilities of occurrence could not be realistically quantified based on available data.

Comment #2

The oil spill contingency plan is mentioned in Chapter 4 as a mitigating measure and is available as referenced in the Table of Contents in Chapter 1.

Comment #3

Mileage and kilometer distances in Figure 1, Section 1.0, have been changed to reflect this comment.

Comment #4

Section 1.0, Introduction, seventh paragraph, has been changed to reflect this comment.

Comment #5

This suggested paragraph has been incorporated into Section 1.0, Introduction.

Comment #6

Revisions have been made in Section 1.1.1.1, under Details of Arizona, New Mexico, and Texas Route, to reflect this comment.

Comment #7

Suggested footnote has been added to Section 1.2.3.1, Table 1.2.3.1-1.

Comment #8

Section 1.2.3.1, Table 1.2.3.1-1, has been corrected to reflect this comment.

Comment #9

Section 1.2.3.1, Abandonment and Conversion of Gas Pipeline, has been revised to reflect this comment.

Comment #10

Section 1.2.3.1, Abandonment and Conversion of Gas Pipeline, has been revised to reflect this comment.

Comment #11

Text change has been made in Section 1.2.3.2, under Actions Following Construction, Testing.

Comment #12

Section 1.2.3.2, under Line Pipe, has been changed to reflect this comment.

Comment #13

Text change has been made in Section 1.2.3.2, under Actions Following Construction, Testing.

Comment #14

This sentence in Section 1.2.3.2, under Actions Following Construction, has been revised to reflect this comment.

Comment #15

This paragraph has been added in Section 1.2.3.5, under Line Pipe and Valves, to reflect this comment.

Comment #16

The text has been revised extensively.

Comment #17

Section 2.1.2.2 was changed to reflect this comment.

Comment #18

Comment was noted but no text change was made.

Comment #19

The text was changed in Section 2.1.2.2 to reflect this comment.

Comment #20

Comment was noted but no text change was made.

Comment #21

Comment was noted but no text change was made.

Comment #22

Comment was noted but no text change was made.

Comment #23

A text change was made in Section 2.1.8.2, Pipeline Route, to reflect this comment.

Comment #24

This paragraph in Section 2.1.8.2, under Yuman Desert Biome, has been deleted.

Comment #25

Comment was noted but no text change was made.

Comment #26

A text change was made in Section 2.1.8.2, under Aquatic, to reflect this comment.

Comment #27

Comment was noted but no text change was made.

Comment #28

A text change was made in Section 2.1.8.3, under Port of Long Beach, Terrestrial and Aquatic Species, to reflect this comment.

Comment #29

Probabilities for various impacts were not always quantifiable with the information available. It was felt that the "worst-case" concept represented the most acceptable manner of presenting potential impacts in such cases. The discussions of impacts (including beneficial impacts) from displacement of foreign crude in Section 3.1.6.1.2, under Effect of Oil Replacement, and in Section 3.1.16.5, are believed to be adequate. Refer also to Section 4.1.5 for the applicant's proposed trade-offs.

Comment #30

This wording in Section 3.0 has been revised.

Comment #31

The Section 3.0 has been extensively expanded.

Comment #32

The comment was noted but no text change was made.

Comment #33

The treatment of trade-offs has been substantially changed in the FES. They are now considered applicant committed mitigating measures in Section 4.1.5.

Comment #34

The oil spill contingency plan developed by the applicant is available as referenced in the Table of Contents for Chapter 1 and included in Chapter 4 as a mitigating measure.

Comment #35

A clarifying statement was made in Section 3.0 to reflect this comment.

Comment #36

A text change was made in Section 3.1.2.1.2, Operation, to reflect this comment.

Comment #37

A text change was made in Section 3.1.2.2.1, Conversion/Construction, to reflect this comment.

Comment #38

In Section 1.1.1.1, under Details of Arizona, New Mexico and Texas Route, the applicant proposes construction to install new long-radius bends and pig traps at both the top and bottom of Guadalupe Pass.

Comment #39

The organization has been revised to reflect this comment.

Comment #40

See Comment 38.

Comment #41

Sections 2.1.3.3.2 and 3.1.3.3.2 have been revised to include an evaluation of seismic hazards east of California.

Comment #42

Sections 2.1.3.3.2 and 3.1.3.3.2 have been revised to include discussion of the route's liquefaction potential.

Comment #43

An approximate figure of 10 acres has been used for the land disturbed during pump station construction because an exact figure is not known.

Comment #44

Section 3.1.4.2.2, Operation, has been revised to reflect the anticipated use of the existing pipeline access roads.

Comment #45

See response to Comment 43 above.

Comment #46

Based on present data and knowledge of the area, BLM believes that the average of 2.3 accidents per year rate is a valid figure.

Comment #47

Material from the applicant has been utilized in Sections 2.1.7.3 and 3.1.7.3.

Comment #48

Impacts on vegetation in Arizona are discussed in Section 3.1.7.2.1, under Yuman Desert Biome, Arizona Upland Desert Biome, and Desert Grassland Biome.

Comment #49

The text in Section 3.1.8.2.2, Operation, was reworded to state that the corridor bisects one of the most important sites for bighorn sheep in the entire Dome Rock Mountain system. No other changes were considered necessary.

Comment #50

Section 3.1.9.2.1, under Redlands to Indio Pump Station, has been revised to reflect this comment.

Comment #51

Section 3.1.10.3, New Mexico, has been corrected.

Comment #52

Comment was noted and no text change was made in the FES.

Comment #53

Comment was noted and no text change was made in the FES.

Comment #54

Noise levels at the roadside rest area without the project vary between 40 and 60 dBA, or more. This is reflected in Table 2.1.11.2-1 of the FES. Users of the rest area, during the quieter moments, would be aware of the pump station noise unless it is mitigated.

Comment #55

Section 3.1.16.5, under Natural Gas, has been revised to reflect this comment.

Comment #56

Section 3.1.16.5, under Natural Gas, has been revised to reflect this comment.

Comment #57

Section 3.1.16.5, under Natural Gas, has been revised to reflect this comment.

Comment #58

Table 3.1.16.5-4 has been revised.

Comment #59

Section 3.1.16.5, under Natural Gas, has been revised to reflect this comment.

Comment #60

Table 3.1.16.5-4 has been revised to reflect this comment.

Comment #61

Section 3.1.16.5, under Natural Gas, has been revised to reflect this comment.

Comment #62

Section 3.1.16.5, under Natural Gas, has been revised to reflect this comment.

Comment #63

Section 3.1.16.5, under Natural Gas, has been revised to reflect this comment.

Comment #64

Tables 3.1.16.5-5 and -6 have been revised in the FES.

Comment #65

Chapter 4, Mitigating Measures, has been substantially revised, including discussions of relocations of pump stations.

Comment #66

Although Chapter 4 was substantially revised, most mitigating measures relating to open space and aesthetics were believed warranted.

LAW OFFICES
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WILLIAM B. O'CONNELL, JR.
ERNEST C. BAYNARD, III
THOMAS M. RYAN
ROBERT J. GRADY

January 25, 1977

Mr. Curt Berklund
Director of Bureau of Land Management
18th Street & C Streets, N.W.
Washington, D.C. 20240

Dear Mr. Berklund:

1 Attached are the comments submitted on behalf of the Sohio Transportation Company on the Draft Environmental Impact Statement (DEIS) for the West Coast-Mid-Continent Pipeline Project.

While the DEIS, on a whole, appears to be satisfactorily written, factual, and reasonably comprehensive, further attention needs to be focused on certain critical areas as have been identified in the comments in order to facilitate a well-rounded, comprehensive final Environmental Impact Statement. Selected comments and updated information of particular concern are summarized as follows:

Description of the Project

Sohio will require 11 vessels, not 14, to transport 700,000 bbl/d of Alaskan crude from Valdez to Long Beach.

The Draft Environmental Impact Statement presents information implying that landfill will be accomplished utilizing some of the dredge materials as one aspect of this project. This inference must be construed as incorrect because the proposed project in no instance is reliant upon the necessity for landfill. The landfill aspect of the Port of Long Beach is within the realm of the Master Plan developed by the Port Authorities at this West Coast Port.

Additional updated information on the construction details of the break-water, trestle and port facilities are presented throughout the text of the comments.

The present project planning incorporates the use of an independent microwave system to provide the basic communications facilities. This system to be owned and operated by others is a microwave facility extending from Los Angeles to Houston and is commonly referred to as the LAH system.

Continued evaluation of the pipeline construction methods has resulted in the selection of pipe coating procedures for the project. The cathodic protection coating will be applied at plant coating facilities with a minimal amount of coating to be done at the construction site.

The following comments contain an expanded description of the functions of the project control system and local logic systems.

Description of the Environment

References presented in the DEIS are not adequately cited to provide the basic information for a comprehensive review.

The text of the DEIS omits the lithologic description of stratigraphic units. The environmental and engineering behavior of units depends to a large degree upon the lithology of stratigraphic units.

The DEIS does not present a discussion concerning why the southwest is desert country and why biologies of deserts are sensitive to perturbations and slow to recover. The omission dilutes the effective arguments that the West Coast- Mid-Continent Pipeline Project will have minimal environmental impact. Discussions of this type should be incorporated in the EIS document.

The DEIS document does not contain a discussion on why parts of southern California and desert areas of neighboring states are already impacted (e.g., introduction of alien plant and animal species, subtle alteration of water flows in desert areas because of past construction, etc.). This omission has reduced the effectiveness of being able to state that the West Coast- Mid-Continent Pipeline Project will have minimal environmental impact.

Impact on Environment

40 C.F.R. Section 1500.8(a)(3) requires that an EIS contain a discussion of "[t]he probable impact of the proposed action on the environment. (Emphasis added.) The DEIS very rarely discusses the probable impacts and usually discusses the "worst case" scenario.

With regard to oil storage tank emissions it is evident that the data obtained by Chicago Bridge and Iron on air emissions provides more reliable information. This data should be included in the EIS.

Analysis of tanker related pollution in the DEIS is performed on the presumption that the project will require 14 vessels rather than the 11 vessels Sohio anticipates it will need to transport the Alaskan crude oil. Sohio has expended considerable effort in determining how many tankers, and the sizes of these tankers, which it would need to effect its involved proposal. Sohio has concluded that the 11 vessels which characteristics are listed in Table 1.1.1.1.-1. would be able to satisfactorily transport 700,000 bbl/d of Alaskan crude oil from Valdez to Long Beach. The conclusion is a sound one and based upon an analysis of modern world tanker fleets. Any analysis of tanker related environmental impacts should be based on a tanker mix of 11 vessels.

An expansion of the potential impacts from hydrostatic testing activities is presented in the text of the comments.

Numerous comments on the impacts of soils, erosion, drainage patterns and river crossings are located in the following text.

Mitigation Measures

The discussion on mitigation measures listed in the DEIS needs to be expanded so that there is no question as to the precise status of each measure, such as whether a measure is merely proposed, who proposed it, by what authority, to what end, and its anticipated effectiveness.

Relocation of pump stations and associated power lines is suggested in several mitigating measures. Throughout the development of the project design, the location of the pump stations and the resulting potential impacts have been of prime consideration. During the initial development, a pump station was tentatively located within the Kofa Game Range as a result of hydraulic studies. Additional development and adjustments to the pipeline system resulted in the relocation of this pump station to a less sensitive area. This approach is characteristic of the efforts extended during the design and hydraulic studies to reduce potential environmental impacts. The criterial for the location of pump stations include:

- avoid environmentally sensitive areas
- minimize the effects of power line facilities
- maximize the use of existing compressor sites

With the continual adjustments to the system to recognize these aspects, the proposed pump station locations have become increasingly fixed and, in most cases, have minimal latitude for relocation.

Relocation of the storage tanks from the Pier "J" to an inland site is outlined in the mitigation measures list. Engineering studies of the proposed terminal operation have determined that it is not operationally feasible to unload tankers and transfer the oil to the pipeline without tanks at Pier "J". Initially, the project included eight tanks on Pier "J" and subsequent mitigating design criteria allowed only six on Pier "J" and two at an inland site.

Alternates to the Proposed Action

The discussion of alternates to the proposed project should be addressed in a more thorough manner in the EIS.

We trust that the enclosed comments consisting of a two volume compilation and an addendum, will be of assistance to you in preparing the final Environmental Impact Statement on the proposed Sohio project.

Sincerely,

Quinn O'Connell

Attachments

RESPONSE

Comment #1

All comments submitted by the applicant and the applicant's consultant have been considered and are summarized in the Summary of Written Comments preceding this section.

9.17.7 Miscellaneous Letters

The following letters are from private groups and individuals. These letters did not express specific comments on the adequacy of the Draft Environmental Statement and required no responses.

6021 E. 28th St.
Tucson, Arizona 85711
December 28, 1976

SOHIO Project Office
P.O. Box 660
Los Alamitos, Calif. 90720

Attn: Charles R. Tulloss

Dear Sir:

On behalf of the Southern Arizona Wildlife Callers and myself, I must bring up two objections to your project as proposed.

1. The route across the KOFA Mountains where the construction will have a diesterous effect upon the highorn sheep population located therein.

2. The storage facility that is proposed for construction near the Black Hills because of the resulting loss of quail habitat and one of Arizona's finest bird hunting areas.

Both the pipeline through the KOFA Mtns. and the storage facility can be moved to better locations.

Each of these points were brought up during your meeting here in Tucson with specific reasons why these should be changed.

Unless the two objections noted are corrected, the SAWC, Inc. and I must go on record as opposing the plan.

Yours truly,

Michael J. Sweedo

Michael J. Sweedo

Project Manager
Bureau of Land Management
P.O. Box 660
Los Alamitos, Ca. 90720

January 25, 1977

Dear Sir:

I wish, most emphatically, to record my opposition to the development of a Central Coast site for the off-loading of crude oil from Alaska or anywhere else. Such a facility would be only the beginning of a huge complex of related enterprises and facilities all of which would deterioriate the agricultural and recreational character of the area. The thousands of people who visit the Central Coast area regularly do so in order to get away from the very kind of industrial and related pollution now found in Southern California.

While I believe that it was a poor plan to bring Alaskan oil to the lower states by tanker, it is an even poorer plan to off-load the entire amount at one location on the West coast and especially to do it at a site along the Central Coast. Put it where the refineries are, if one must be built. Or bring the oil into the country with more pipeline.

Sincerely,

David W. Cook (resident since 1941)
1959 Hays St.
San Luis Obispo, Ca. 93401

IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

1792 (321)
10136

Hon. Robert J. Lagomarsino
House of Representatives
Washington, D.C. 20515

JAN 28 1977

Dear Mr. Lagomarsino:

This is in response to your inquiry of January 12, 1977, on behalf of your constituents concerning the proposed placement of a tanker port along the central California coast.

The SOHIO Transportation Company is proposing a crude oil transportation system from Valdez, Alaska, to Midland, Texas. The proposal involves tanker shipments of up to 700,000 barrels per day of crude oil from Valdez, Alaska, to Long Beach, California; construction of a marine terminal at the Port of Long Beach for crude oil offloading and storage; construction of 237 miles of new pipeline in California and Texas; and the conversion of existing natural gas pipelines in California, Arizona, and New Mexico to crude oil transportation.

In order to assure that the impacts of new projects are fully assessed, environmental statements (ES) must be prepared on all proposed projects which might have a significant impact upon the human environment. Final decisions allowing or disallowing new projects can only be made after the final statement has been completed.

The draft ES for SOHIO's proposed crude oil transportation system was issued on November 25, 1976. A series of public hearings were held at various locations in the States of California, Washington, Arizona, New Mexico, and Texas during the week of January 3-7, 1977 In addition, a 15-day extension was granted by the Department of the Interior. This extended comment period expired on January 25, 1977. The comments received from the public during the draft ES comment period will be utilized in the preparation of the final ES. which is scheduled to be released April 1977.

Your constituents' comments will be considered in the preparation of the final ES.

Sincerely yours,

/s/ George D. Lee

Acting Assistant Director

cc: SOHIO EIS Team

Mr. Robert Lagomarsino
255 Butte Drive
San Luis Obispo
Calif. 93401

Dear Mr. Lagomarsino:

We who live in the Sunset Palisades area of Pismo Beach, strenuously object to the location, in the area extending from Avila Beach to Guadalupe, of the contemplated off-shore terminal for unloading crude oil brought by tanker from Alaska and other areas outside the U.S. mainland.

At present we have entirely pure air throughout the area, and the view of ocean and beach is entirely unmarred by any man-made commercial structure. The ocean and beaches are unpolluted. The proposed installation of two or three huge monobuoys, only a few miles offshore, together with huge onshore storage tanks and pumping stations for transferring, through large pipelines, the oil unloaded from large tanker ships, would undoubtedly result in the following undesirable consequences:

1. Air pollution with all its adverse effects, including its impact on agriculture.
2. Ocean and beach pollution.
3. A possible major oil spill, resulting in destruction of beaches and Pismo clams.
4. Influx of refineries and petroleum-related industries, bringing additional pollution.

Our area is the first view of the ocean which meets the eye of southbound travellers on highway 101. This beautiful view should be preserved, unsullied, for future generations of travellers.

We hope you will use your influence to prevent the threatened ravishing of our beautiful coastline.

Sincerely yours,

Mr. Ralph Girolo
420 Indio Drive
Sunset Palisades
Pismo Beach, Ca. 93449

Mr. Robert Lagomarsino
255 Butte Drive
San Luis Obispo
Calif. 93401

Dear Mr. Lagomarsino:

We who live in the Sunset Palisades area of Pismo Beach, strenuously object to the location, in the area extending from Avila Beach to Guadalupe, of the contemplated off-shore terminal for unloading crude oil brought by tanker from Alaska and other areas outside the U.S. mainland.

At present we have entirely pure air throughout the area, and the view of ocean and beach is entirely unmarred by any man-made commercial structure. The ocean and beaches are unpolluted. The proposed installation of two or three huge monobuoys, only a few miles offshore, together with huge onshore storage tanks and pumping stations for transferring, through large pipelines, the oil unloaded from large tanker ships, would undoubtedly result in the following undesirable consequences:

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We hope you will use your influence to prevent the threatened ravishing of our beautiful coastline.

Sincerely yours,

Mr. & Mrs. Dale C. Nickel
420 Indio Drive
Sunset Palisades
Pismo Beach, Ca. 93449

Mr. Robert Lagomarsino
255 Butte Drive
San Luis Obispo
Calif. 93401

Dear Mr. Lagomarsino:

We who live in the Sunset Palisades area of Pismo Beach, strenuously object to the location, in the area extending from Avila Beach to Guadalupe, of the contemplated off-shore terminal for unloading crude oil brought by tanker from Alaska and other areas outside the U.S. mainland.

At present we have entirely pure air throughout the area, and the view of ocean and beach is entirely unmarred by any man-made commercial structure. The ocean and beaches are unpolluted. The proposed installation of two or three huge monobuoys, only a few miles offshore, together with huge onshore storage tanks and pumping stations for transferring, through large pipelines, the oil unloaded from large tanker ships, would undoubtedly result in the following undesirable consequences:

1. Air pollution with all its adverse effects, including its impact on agriculture.
2. Ocean and beach pollution.
3. A possible major oil spill, resulting in destruction of beaches and Pismo clams.
4. Influx of refineries and petroleum-related industries, bringing additional pollution.

Our area is the first view of the ocean which meets the eye of southbound travellers on highway 101. This beautiful view should be preserved, unsullied, for future generations of travellers.

We hope you will use your influence to prevent the threatened ravishing of our beautiful coastline.

Sincerely yours,

Mr. Eileen Hite
253 El Portal Drive
Sunset Palisades, Ca.
93449

ROBERT J. LAGOMARSINO
19TH DISTRICT, CALIFORNIA

1319 LONGWORTH BUILDING
WASHINGTON, D.C. 20515
202-225-3601

PUBLIC DOCUMENTS
COMMISSION

Congress of the United States
House of Representatives
Washington, D.C. 20515

COMMITTEE ON
INTERNATIONAL RELATIONS

SUBCOMMITTEES:
INTERNATIONAL SECURITY AND
SCIENTIFIC AFFAIRS

COMMITTEE ON
INTERIOR AND INSULAR
AFFAIRS

SUBCOMMITTEES:
NATIONAL PARKS AND RECREATION
TERRITORIAL AND INSULAR AFFAIRS

125

January 12,1977

The Honorable Thomas Kleppe
Secretary of Interior
Department of Interior
Washington, D.C. 20240

Dear Mr. Secretary:

Enclosed are copies of several letters I have received from constituents concerning the proposed placement of a supertanker port along the central California coast.

I would appreciate your comments.

Thank you for your attention.

Sincerely,

ROBERT J. LAGOMARSINO
Member of Congress

RJL:sj
Enclosures

THIS STATIONERY PRINTED ON PAPER MADE WITH RECYCLED FIBERS

255 Butte Drive #1
Los Osos, CA 93402
January 3, 1977

Mr. Robert J. Lagomarsino
House of Representatives
Washington, D.C. 20515

Dear Robert:

We are forwarding a group of letters which were delivered to us. Since the street address on the envelope was ours--though the city was not--we could not be sure who they were intended for until we opened them. In fact, it is a real tribute to the local postal service that they were delivered anywhere! But they definitely seem from their content to be meant for you.

In fact, we would like to echo the concern of these correspondents about reports of a large oil port in the San Luis Bay area. As new residents of this area who formerly lived in Sacramento and San Jose we are acutely aware that this is one of the dwindling few places in California that can be enjoyed in physical and mental health by residents and by visitors. Besides the dangers inherent in large petroleum installations, the sudden growth which would be forced by any new facility of the magnitude being discussed would severely strain the Central Coast. This is an area of limited services, limited housing, and limited land available for development, and growth must be more gradual if it is not to destroy the unique advantages of living and visiting here.

We would like to note that we feel this concern even though we are intimately involved in the construction industry. I myself am a General Contractor (Lic. #317378) and a new full-time instructor of Construction Technology at Cuesta College. In fact it was this position with Cuesta which enabled us to move to San Luis Obispo County, which we hope to make our permanent home.

-2-

We would also like to take this opportunity to let you know how proud the Northern California Lagomarsinos are of your political success and, more importantly, your political courage. It is certainly uplifting to have people all over the state ask if we are related to you and have them tell us what a fine man you are--an opinion they have often formed from dealing with you in person. In fact we were quite excited about being closer to your district, where we can hear more about your programs. Keep up the good work--and a little rabble-rousing!

Yes, we are in fact related to you. My father, Victor R. Lagomarsino is your cousin (son of the late Victor Emmanuel Lagomarsino of San Francisco). He is still in the Sacramento area--in Meadow Vista, Placer County, and he wants us to relay his greetings and congratulations. And you sponsored my brother Thomas Seivert Lagomarsino for Naval Officer Training several years ago. He is now a Lieutenant Commander in Naval Air, having recently been sponsored by the Navy to complete his master's degree in political science at San Diego State University. He will soon begin duty in Hawaii. He too sends his greetings and congratulations, as do the rest of the family.

Unfortunately, we have been remiss in writing to our legislators--in fact we apologize for not forwarding these letters to you sooner--but we want you to know that we are in favor of your innovations for making Congress more responsible to its constituents and more innovative in its collective actions.

Thank you.

Sincerely,

Peter R. Lagomarsino
Nancy Lagomarsino

Peter R. Lagomarsino
Nancy Rankin Lagomarsino

encl

Mr. Robert Lagomarsino
255 Butte Drive
San Luis Obispo, Ca.
93401

Dear Mr. Lagomarsino:

You are no doubt aware that Governor Brown is seriously considering the San Luis Bay area, from Guadeloupe to Avila Beach, as the location of an off-shore terminal for unloading Alaskan crude oil.

We who live in the Sunset Palisades area are strongly opposed to any such location of terminal facilities. It would introduce pollution into our atmosphere which now is entirely pure and wholesome. It would hideously mar the beauty of the panoramic view of ocean and coastline which we at present are privileged to enjoy. Our area is the first view of the ocean that meets the eye of travellers coming south from the San Francisco area. This beautiful view should be preserved, unsullied, for future generations of travellers.

We hope that you will use your influence to prevent the threatened ravishing of our beautiful coastline.

Sincerely yours,

Lynn and Frances Latta

Lynn and Frances Latta
431 Inoio Drive,
Sunset Palisades, Ca.
93449

Point Fermin Residents' Association

January 4, 1977

Statement on the SOHIO terminal:

I am Gregory Smith, resident at 3915 Carolina Street, San Pedro. My views represent a great many of those who experienced the explosion of the tanker on December 17. Our Association is joined by four others in the San Pedro community in its concern for projects now sponsored by the two harbor departments.

We wish to direct your attention to the proposal of William Samaras, today formally sent to the Energy and Resources Commission in Sacramento, that San Clemente Island be designated as an Energy Storage and Conversion Park, and developed to handle Alaskan crude oil shipments and liquefied natural gas. The proposal is attached.

Perhaps it is natural at this time that a first response to such a proposal is that political and jurisdictional obstacles are insurmountable for such a solution. Departments of government, agencies, and even officeholders have a certain angle of repose. But like the bulk of the Sansinena (which similarly has an angle of repose) some immense efforts have to be made toward reconstruction of a new terminal and changing a inoperable berth. We think the change should be in the direction of an elected Port and Channel Authority with responsibility for what are presently known as Long Beach and Los Angeles Harbors. We envision that Port Authority as being a primary responsibility of a new county constituting the southern portion of Los Angeles County, which of course includes Catalina Island, and as newly created would also include San Clemente Island. We feel that Banning County would be an appropriate name, as it commemorates the man who brought the first railroad to the port area, who developed wharves, and who owned a portion of the Channel Islands.

Thus we recommend that the SOHIO terminal not be located in either harbor, but rather safely off-shore. It could be the economic base for a new port authority and a new county.

Post Office Box 2602 Fort MacArthur Station San Pedro, California 90731

Proposal for an Energy Storage and Conversion Park

on San Clemente Island, California

by

William F. Samaras[1]

Introduction

It has become increasingly apparent that the proposed liquefied natural gas and vaporization plant will not be built at berth 302 on Terminal Island. Since the explosion of the tanker Sansinena on December 17, 1976, the public hostility, as well as organizational and departmental antipathy toward such an LNG facility has hardened. The Pacific Lighting Company and the Los Angeles Harbor Department advocacy of the installation is opposed at federal, state, and local levels. The explosion has vividly expressed the sociological and safety factors inherent in such hazards within the confines of the port, near densely populated residential areas. Coupled with meteorological and geological parameters, the accident manifests the folly of such a proposal as the LNG terminal, adjacent as it would be to tank farms and near the site of the proposed Alaskan crude terminal in Long Beach Harbor.

Assuming an eventual need for liquefied natural gas terminal or terminals in Southern California, and an immediate insistence on a decision on Sohio's application for a crude oil terminal, we propose an alternative site off-shore, well away from the myriad hazards present in an ill-planned two harbor complex. The optimal, stable off-shore site that would accommodate both the needs of gas and oil applicants would be San Clemente Island.

Concept

An Energy Storage and Conversion Park can and should be constructed on San Clemente. The future ramifications for such an installation are many; the concomitant arguments to the contrary are economically, ecologically and technologically surmountable. So too are the political problems.

[1]Research Associate, Marine Mammals Division, Museum of Natural History of Los Angeles County; teacher of marine biology, Carson High School; M.S. in Earth Science, Northern Arizona University.

San Clemente Island presently belongs to the United States Navy, and the surrounding waters and sea bottom are wholly within territorial waters defined by the 200 mile limit. In shape the island is an elongated, truncated triangle. From the northwest tip to its southeast terminus, the island is approximately 21 miles long with a maximum width of 5½ miles. The vertical relief is gradual, nearly level. The highest point on the island is 1965 feet, with the slope rising gradually from the northwest shore to a central peak and again diminishing to sea-level at Pyramid Cove in the southeast. From Wilson Cove, it is about 51 miles to Point Fermin lighthouse on the mainland, and about 22 miles to the nearest landfall on Santa Catalina Island. This 22 mile wide channel would provide excellent seaway and steerage room for the proposed LNG tankers, as well as for those carrying Alaskan crude oil. Exceptional deep water anchorage is available all along the north coast, with the depth from sea level dropping off to 300 feet within one-fourth mile and to 3000 feet within two miles from shore. These physical parameters readily provide for the utilization of monobuoys and/or near-shore pier facilities for off-loading hazardous cargos. Storage and vaporization facilities for LNG, and storage and processing installations for crude oil would be constructed and maintained on shore.

This concept would achieve a three-fold purpose: first, it would minimize the possibility of tanker collision, ramming, or grounding, a condition that would be present if the massive ships were funneled into Los Angeles or Long Beach Harbors; secondly, the hazard of potential oil spills and containment is minimized and/or localized due to close proximity of the carrier with the storage facilities; and in the event of a fire or water spill of LNG the site would be 50 miles from any population concentration, and thus control would not be hampered by other facilities, traffic, and problems of access or evacuation of populations at risk.

Transshipment of natural gas and oil products from the installations could be accomplished through submarine pipelines. The pipes would be installed with automatic shutoff and shunt valves at reasonable intervals. There are two directions for the pipelines from San Clemente: the first is north from the southeastern end of the island, skirting Santa Catalina Island and intercepting the mainland at either San Pedro or Long Beach; the second is northwest to Ventura or Oxnard. The latter route would have the added advantage of being able to link with flow from feeder pipelines from the drilling platforms at Tanner and Cortes Banks, as

well as those coming south from the Santa Barbara fields.

Terrestrial Considerations

The ecological impact would be minimal on San Clemente Island. What the naval bombing practice has not destroyed or severely altered over the years, the goats have eaten off. The primary vertebrate is a sub-species of Channel Island fox, *Urocyon littoralis*, and the population could easily be trapped and re-established on San Nicolas Island. The marine biota would be affected to some extent, depending upon spill frequency and technological solutions for seawater warming of LNG that might involve biocides and neutralizers, plus the accompanying cold sink near the vaporization plant outfall.

Structurally, San Clemente Island is composed almost totally of Miocene volcanics, primarily andesite. Further data on the environmental aspects of San Clemente and proposed LNG and crude oil terminals are of course available through local and state agencies.

Conclusion

This proposal is prompted by the multi-level opposition that has been manifest toward the Los Angeles and Long Beach proposals to bring LNG and crude oil in massive quantities to terminals in urban areas. The explosion of the oil tanker close to residences, with the resulting injuries and shock and property damage have made a change of site for the terminals mandatory. We offer this proposal as an initial effort that will be followed by detailed survey, assuming serious consideration is encouraged and merited. It seems clear that public expression and expert judgment requires a logical and rational approach to energy installations such as has not been the case previously in the harbors serving the Los Angeles metropolitan area.

Mr. Charles E. Spahr
SOHIO Petroleum Co.
1750 Midland Building
Cleveland, Ohio 44115

Dear Mr. Spahr:

Might I suggest that the elimination of California State Air Resources Board opposition to your SOHIO West Coast to Mid-Continent Pipeline Project could be attained by inclusion of/and (active support for) expanded terminal facilities to receive BOTH crude AND liquified natural gas.

The outline of my proposal is set forth in a presentation at the Long Beach Environmental Impact Report Public Meeting on the SOHIO Project on November 30, 1976.

From the SOHIO Project standpoint, this modification and expansion would have a desirable effect on your proposed project, i.e., the addition of one additional berth designed to handle either crude or "L.N.G.", and the addition of one "Boil Off" gas receiver at Pier J - with underwater pipelines from Pier J southeastward one mile to "isolated" L.N.G. storage tanks on 75 acres of land-fill which could be formed at the Long Beach Breakwater, in the dredging required for deepening of the Long Beach entrance and the Pier J facilities, required for your terminal. The guiding criteria, as mentioned in my proposal, is Energy Cost Basis.

This modification would benefit SOHIO in providing immediately for your eventual contemplated expansion to one million barrels per day input of crude oil and the use of the extra unused Transcontinental Gas Pipeline. It would also benefit Long Beach Harbor Department in useful formation of additional land in a logical and safe place for the storage of L.N.G. Most importantly, it would be within a feasible distance of the massive energy producing power plants that could not only use part of the L.N.G. in the production of power (thus reducing

pollution created from burning oil!) but also use the cryogenic characteristics of L.N.G. in increasing the efficiency of their power production -- while at the same time re-vaporizing L.N.G. into natural gas for injection into our Southern California Gas pipeline systems.

This aspect of energy savings combined with environmental improvement of our atmosphere, and sea water temperature stability within the Long Beach-Los Angeles Harbor are FACTS! -- which you could use to implement adoption of your proposed facility.

The disasterous explosion of a crude tanker at Union Oil Pier 46 comes at a very inopportune time for SOHIO -- in their applications to government agencies for approval of the Long Beach Pier J Facility! The "environmentalists" will make a "hey-day" of this!! And to top it all off, the equally disasterous grounding of a crude oil tanker on the East Coast!

However, both disasters could serve as a positive argument for the viability of the SOHIO Terminal withalso a L.N.G. Terminal closely adjacent to it. However, both would be isolated in respect to living or business establishments.

This is what I propose in the attached Long Beach Harbor sketch. In view of the Union Oil Pier 46 disaster, I think the Southern California Gas proposed L.N.G. Facility at Terminal Island is OEAO! A better placement of that facility could be:

1. The best and most logical on an Energy Cost Basis, -- Anaheim Bay Ammunition Depot for unloading, with storage tanks two miles north and adjacent to Haynes and Southern California Edison plants (see map enclosed).
2. Second Best -- SOHIO proposed unloading facilities (plus extra terminal for L.N.G.), with pipelines to storage facilities at land to be formed on isolated Long Beach Breakwater, for storage tanks of L.N.G. (see map enclosed).

Option Number One would require an easement from the U.S. Navy for approx.

50 acres of land - not an easy project! Option Number Two would require a commitment of five million dollars for breakwater rock and land formation by the Long Beach Harbor Board. However, no "environmentalists" could claim that such a needed facility could threaten established coastal zone improvements, being 1½ miles from the coast. The "trade-off" benefits potentially implicit in L.N.G. re-gasification technology is not known or appreciated by the public -- or the "environmentalists". This presentation would be your responsibility, as well as the Southern California Gas "P.R." people.

Gentlemen; these facilities logically belong here -- we need them NOW -- we especially need the natural gas! Common sense demands that you consort with both your competitors and your customers, -- in spite of Anti-Trust Laws -- to bring these facilities here.

What better argument can you present to the state and federal agencies (as to the use of gas pipelines for crude to the Midwest for SOHIO), than the support and aid of the importation of L.N.G. to Long Beach? This makes doubly redundant any claim by them as to the need for such pipelines for transport of non-existant gas from the Midwest through those empty pipelines to California.

I speak only as a resident of Long Beach for twenty-six years; I have no interest, except 200 shares in Pacific Lighting, in any of the involved companies. I have studied your SOHIO Draft Environmental Impact Report and it makes good commonsense as one portion of the energy input so needed here. However, inerting methods for all crude oil tankers unloading at your proposed facility will be mandatory (as a result of the tanker explosion at Union Oil Dock), which could easily be incorporated into your ships. Any foreign ships unloading at your terminal would require supplemental inerting methods. This could be provided either by Long Beach Harbor Dock Facilities or by barge, along side ship facilities to provide carton monoxide (washed gas from ship's stack) or CO_2 into tanks being

unloaded to prevent any possible repetion of the disasterous Union Oil explosion -- and to ease the fears of the "environmentalists". L.N.G. off-loading (being an entirely closed system) is far safer than crude oil delivery, without inerting facilities for ships tanks.

The over-reaction I feel certain to come about because of this tanker explosion could nullify all the expense and hard work SOHIO has put into this most sensible and logical project which would benefit the U.S.A. as a whole. The transport of excess crude to the Midwest for refining into use products is secondary to the needs of California and Long Beach. Such objects depend upon the pipeline, and your factual demonstration - through the use of marine transported L.N.G. that these unused pipelines will never be required!

The arguments against such transport of crude depends upon alternate methods by which Southern California can receive our much needed natural gas. Can there be a more persuasive argument for SOHIO to support and aid financially, if necessary, a viable L.N.G. Project in Long Beach?

For example, the Manager of the Haynes Plant in Long Beach, which produces more power than Boulder Dam, could increase the efficiency of his condensers -- PLUS -- generating more power while re-gasifing L.N.G. for benefit of Southern California users! One and one-half million gallons of sea water, temperature rise of 20°F., could be used instead to re-gassify L.N.G. and thus moderate the claims of the "environmentalists"!! The Edison Plant, closely adjacent, could do likewise.

The trade-off benefits of L.N.G., in alleviating the pollution increase required by power demands of pumping your excess crude out of this area, could be completely washed off by delivery of L.N.G. at power plant sites. Re-gasification costs amount to approximately 2% of product.

This cost can be saved or used to reduce atmospheric pollution plus an additional 2% in waste heat presently dumped back into the ocean by these same power plants. At present the power companies are forced to use SO_2 emitting fuel oils (low sulphur fuels when obtainable from Indonesia -- like the 100,000 barrels obtained from the tanker that exploded). In fact, they agreed (at a cost of $30,000,000) to use low sulphur fuels for the next 26 months (before the A.P.C.O.) here in Long Beach, due to the lack of clean burning natural gas.

These "pallitive" measures by the power plants only point up the insistant demand that Southern California Basin atmosphere cannot absorb more pollution emitting enterprises -- no matter how much it may benefit the nation as a whole.

So, it becomes SOHIO's burden -- on a FACTUAL BASIS -- to prove that installation of this West Coast to Mid-Continent Pipeline Project is viable not only for the transport of crude to the midwest (with safety) -- but to reduce our atmospheric pollutions here in the Los Angeles Basin.

My postulate is that this can be done by delivery of L.H.G. to the RIGHT PLACE at the RIGHT TIME, i.e., in coordination with your establishment of facilities at Pier J in Long Beach.

Expansion of, or re-submission of, your Environmental Report will probably be required. However, in view of the foreign crude oil tanker explosion only four miles from your proposed facility (and the "back-off" of politicians because of it), my fear is that both needed projects will go down the drain, due to ignorance and fear by the local public.

Positive proposals guaranteeing that no repetition of that disaster could

take place here, namely, the mandatory inerting of ship's cargo tanks (plus vigorous dissemination of those facts to the public), is absolutely necessary in order to see the establishment of those facilities here.

I will gladly assist in any way possible and your comments regarding the above would be most welcome.

Very truly yours,

Gilbert H. Bishop

Gilbert H. Bishop
2140 Tulane Avenue
Long Beach, CA 90815

Phone: (213) 597-3101

cc: Pacific Lighting
Southern California Edison
Long Beach Harbor Board
Los Angeles Harbor Board
U.S.C.G. 11th District
Seal Beach Ammunition Depot
Calif. Coastal Zone Commission
Energy Section, President Carter's Staff
L.A. Department of Water & Power
Mr. J.A. Stuart, Director, A.P.C.O.

Project Manager,

The impact of the proposed pipeline through Arizona cannot be disregarded. However, assuming that it will be put through, there are intelligent ways to accomplish the job with a minimum impact on the environment.

A pipeline through the Kofas is a frightening idea to me - still, if the line is inevitable, I do agree with the plan to follow the path of the gas line that exists there now. Since there is already piping through the area, additional pipe will not necessarily be harmful. What scares me is the impact the workers will have, out on the all-too-easily-scarred desert once again. I urge you to keep the attitude of protection for the Kofas topmost in mind, and I will certainly be one to label the Bureau as remiss if the project is not supervised with concern for the desert.

For this reason I strongly object to the construction of a pumping station just outside the wildlife refuge where the habitat of the desert bighorn would incontestably be threatened. Protection of the bighorn, a very endangered animal, should be the first responsibility of the BLM in the Kofas.

Finally, as one who is aware of the over-all energy picture in Arizona, I also urge that the Bureau do studies of its own regarding the various forms of energy production and application available to Arizona and opt in the future to develope projects with the least possible adverse environmental, political and social impacts. Common sense tells us that renewable energy sources best fit these conditions. Before too long I am sure the Bureau may likely be involved in just these sorts of projects, that will take us far into an intelligent future, much more than the construction of oil pipelines and large power plants.

sincerely,

Paul Lowes

308 Longview Lane
San Luis Obispo, Ca.
December 30, 1976

Bureau of Land Management
% Project Manager
Sohio Project Office
P.O. Box 660
Los Alamitos, Ca 90720

Gentlemen:

Although there is no official proposal, Tom Quinn and others have been actively suggesting that the Central California Coast is the most likely alternative to Long Beach for the proposed Supertanker Port. The citizens of San Luis Obispo County are deeply concerned about the following:

1. That decisions are being made about alternative sites without our input. Even at this formulative stage our representatives and citizens should have a voice in the discussions;

2. That there is no Federal and/or State energy policy formulated so that California will be flooded with Alaskan oil while the East coast and Midwest go wanting;

3. That if there is such a surplus of oil, we wonder why oil will be continued to be pumped out of Elk Hills rather than be reserved for national or military emergencies;

4. That the national interest and desire to be independent of foreign oil is being confused with Standard Oil of Ohio's problem of finding the most convenient (economical and swift) way of moving the Alaskan oil to the rest of the States. Standard's convenience may not necessarily be in the public's interest or convenient for the rest of the nation;

5. That our efforts to conserve ambient air quality in clean areas (which may exceed Federal Primary Air Standards a few days a year) is at the end of a long list of priorities to which State and Federal officials pay only lip-service;

6. That there will be little pressure on SOHIO to "clean up" its operation and develop the necessary technology to control the air pollution generated if it is allowed to move into a relatively clean area and that there will be little pressure from the Federal government to give the Coast Guard the necessary powers to police the tankers;

7. That otherviable alternatives to Long Beach, including an all-pipeline transport system, are not being actively and objectively considered since industry is pushing for a tanker port. Since no matter where the Port is situated it will cause air pollution problems and air pollution standards will be exceeded, these alternatives should be further investigated;

8. That because of the low inversion layer on the Central Californian Coast and relatively small air basin, air pollutants will have a greater and more potent effect here than in other areas;

9. That placing the Port along this coast will endanger a delicate wildlife and ecological balance as well as marring recreational facilities;

10. That there is a lack of available and adequate fire and police personnel to protect and aid in an emergency similar to the one that just occurred in the Los Angeles Harbor;

11. That such a port will add to an already substantial list of prime military targets including Vandenberg Air Force Base, the trans-pacific cable, Diablo Nuclear Power Plant and a proposed liquified natural gas facility.

There is a great deal of concern and opposition to the Port being located along our Coast as witnessed by over 5,000 signatures on a petition, a resolution of concern passed by the County Board of Supervisors, a resolution by both the San Luis Obispo City Council and Morro Bay City Council opposing the port and numerous letters, telegrams already send by private citizens to local, state and federal officials. I feel that the above concerns should heard in your discussions concerning the proposed Supertanker Port and its location. Thank you for your attention.

Sincerely,

Beryl Reichenberg

Beryl Reichenberg

LOS ANGELES AREA CHAMBER OF COMMERCE
404 SOUTH BIXEL STREET LOS ANGELES, CALIFORNIA 90017 · (213) 629-0711

January 5, 1977

Project Manager
Bureau of Land Management
Project Office
P. O. Box 660
Los Alamitos, California 90720

Dear Sir:

The Los Angeles Area Chamber of Commerce Board of Directors supports the planned use of the Port of Long Beach for serving local refineries and transshipment of surplus Alaskan crude oil to the Mid-Continent areas of the United States.

The Chamber believes the use of the Port of Long Beach has a number of substantial advantages in support of a growing economy in the Los Angeles Area. It will provide certain advantages for California as distinguished from the rest of the country.

The planned use of the Port of Long Beach will provide a number of substantial advantages to the Southern California area creating a substantial number of new jobs, providing additional revenues and reducing the cost of deliveries of natural gas supplies.

The Los Angeles Area Chamber of Commerce believes that the Long Beach Harbor has a uniquely long and enviable record for safely handling oil tankers. The Harbor requires a minimum of dredging and no filling to accommodate this project, a statement that can be made about no other port in California.

The Los Angeles Area Chamber of Commerce is of the persuasion that bringing Alaskan oil to a sheltered, existing deep water port such as Long Beach avoids the need for constructing a new supertanker facility in a presently pristine area.

The Chamber believes that it would be of substantial economic benefit to Southern California to utilize the Port of Long Beach as a receiving point for local distribution and transshipment for surplus Alaskan crude oil.

Project Manager
Bureau of Land Management
Project Office
January 5, 1977
Page Two

In the best interests of the business community of Southern California, we respectfully urge your support of the Long Beach Harbor for serving local refineries and transshipment of surplus Alaskan crude oil.

Sincerely,

Paul E. Sullivan

Paul E. Sullivan
President

mm

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James A. Bottoms, First Vice President
William Gainer, Second Vice President
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Richard S. Fortune, Treasurer
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Get Oil Out Inc. P.O. Box 1513 111 East De la Guerra Street Santa Barbara California 93102 Phone (805) 966-1616

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Januery 7, 1977

Charles R. Tulloss,
Project Manager
Bureeu of Land Management
SOHIO EIS PROJECT
P. O. BOX 660
Los Alamitos, CA 90720

Re: CA 972

Dear Mr. Tulloss:

In your letter of December 21, 1976, you requested that written comments on the SOHIO EIS Project reach you by the 10th of January. Unfortunetely, your letter was delayed in the mails and was just received the 4th of January. Since we heve had no eccess to the EIS it is quite difficult to make any relevant comments on the project.

However, there is one aree thet our organization would like to comment on: the routing of tankera carrying Alaskan crude through the Santa Barbara Channel. In spite of Admiral Price's commenta to the contrary, the Channel is known ee a difficult waterway and is in fect called the Graveyard of Shipa by aome mariners.

The Santa Barbara Channel is one of the moat frequently traveled waterways on the Pacific Coaat. Because of its eize, because of prevailing weather conditiona, becauee of manmade hazards (oil platforms) and because of ineufficient navigstionel aida, it haa become one of the moet hazardous areas on the Pacific Coast.

However, the Coaat Guard continuea to maintain that the Channel is relatively easy to navigate. At preaent there are thirteen oil platforms in the Channel. Plans call for an additional number of exploratory drilling rigs and alao an additional twenty-one platforma over the next five yeare. Although the supporting anchora of a drilling rig can extend a thousand yards in each direction, it ia the practice of the Army Corps of Engineera to grant exploratory drilling permits aa cloae as two hundred yarda to a shipping lane.

Approximately 6000 pleaaure craft uee the Channel monthly. With the placement of a LNG Treminal at either Pt. Conception or Port Hueneme it ia estimated that 47 tankere monthly or 565 tankere yearly will travel the Channel filled

hlghly flamnable LNG. Stetistics also show thet 51 tenkers monthly will cerry North Slope crude oil through the channel. These tankers will be much lerger than those now trsversing the channel. If all oll end gas fecilities requested ere grented, there will be e 42% increase of shipping traffic in the channel to en estimated 1,066 ship movements monthly by 1980.

Tenkers pose e greeter environmentsl hazsrd than oil well blowouts. Yet very little is being done to improve the tanker situstion in the Santa Berbere Chennel. The most potentiel cumuletive impect resulting from the projected incressed treffic in the Sante Barbars Channel will be the greeter stetisticel probability of e collision involving e tanker end another vessel, or s tenker and an oil pletform; and the undeniable probability exists that there will be s ship-platform collision in the Santa Bsrcare Channel within the next five yesrs if navigetionsl controls ere not imposed.

Since 1969 Get Oil Out Inc. (GOO) has made repeeted efforts to get shipping controls imposed in the channel and to he'e all tsnker treffic, over 20,000 dwt, routed outeide the chennel. In thls we hsve had the support of the lste Congressman Teague snd preeently of Congressman Robert J. Legomarsino.

It is recognized that the fact the Channel is an internetionel waterway has made it difficult, if not impoeaible, to get mandetory rerouting of shipping traffic outside the cbannel. However, there is no apparent reason why ALL AMERICAN TANKERS cannot be required to take the longer route outside the channel. Several months ago there was a news release stating that tankers carrying North Slope crude (which according to the Jones Act would have to be American tenkers) would volunterily go outside the Channel. While we cannot name our source, thia newa releaee was falee and as of this date it ie planned that tankers carrying Alaskan crude oil will trevel through the channel.

Get Oil Out Inc. (GOO) urges that the following be considered:

1. That the Coast Guard impose mandatory shipping lanes and that the shipping lanee be widened.

2. Thet the Coaet Guerd monitor all channel traffic.

3. That the Coast Guard require the uee of radar controla while a ship ie in the chennel.

4. That efforts be made to apply the "Porta and Waterways Safety Act" to the channel, eatablishing "veasel traffic services" to direct the movement of ships. Thie could be eatablished by uee of "radar watches" and "control towera" to guide traffic through the channel.

5. That all tankera carrying Alaskan crude go outaide the channel.

It ia principally because of the present lack of abaolute control of shipping in the channel that the planned traffic increasee prsent such potential navigational and aafety problema. We recommend that all Alaskan crude traffic go outside the channel and that the Coaat Guard be aeked to immediately impoae mandatory navigational controls on all channel ship movements.

Sincerely,

Ellen Sidenberg

Ellen Sidenberg
Executive Vice-President

ES:es

1763 Appleton St
Long Beach Cal
Jan 4 1977

Gentlemen —

I wish to join with other citizen groups in opposing the Sohio here for several reasons. These giant tankers are already so large to be practical for navigation

After the Markay and Jansinena these monsters have a potential for an even greater disaster

No vapor recovery system can be 100% perfect some hydrocarbons fumes are bound to escape to the atmosphere.

In view of all the oil spills around the world to day there is no need to discuss this subject

Finally why should all of this crude be dumped on this coast when we already have a surplus. Couldn't it be routed around to the east coast where they are short

Considering all of these negative aspects it does not seem reasonable to locate another crude oil terminal in this area

respectfully
Lyle Zalman

7215 Killdee Street
Long Beach, California 90808
January 6, 1977

Project Manager
Bureau of Land Management
Box 660
Los Alamitos, California
90702

Dear Sir:

We would like to add our voicea to those oppoaing the construction of the Sohio supertanker terminal at the Port of Long Beach. As Long Beach homeowners who plan to live here for the rest of our lives, we believe we have some stake in the matter.

The nature of our concern is thia: The only thing that citizens without expertise in technical mattera have to go on is the record, and the environmental record of the kinda of people and agencies most involved with the terminal is not good.

The first group with a questionable environmental record are the spokeamen for Sohio. They represent an industry characterized by a peculiar kind of ahortaightadness which prevents them from looking backward as well as forward. For example, there is the case of the Alaska pipeline itself. In 1973, after the conatruction of the pipeline had been delayed by law for some three yeara, oil industry spokesmen testified before Congress that the lawauit had been a good thing because it had given the industry time to improve the pipeline's design. Yet this was the very design that had been lauded a few years before as "perfect," just as the newer design was now aaid to present no safety problema. Objectiona raised to the newer design were ignored and the resulting series of pipeline troubles is now a matter of record.

Next, we are askad to trust the promise of Sohio that it will trade off emissions with some other facility. Yet according to a atory in the Long Beach Independent of November 22, 1976, page B-1, Sohio vice-president Bob Schsadt "said his firm will not reveal just how it intends to trade off emissiona or identify which firms will be affected." On the basis of no specific information, then, we are being asked to risk the very air we breathe. Theae are just a couple of examplea from the record of one group of people who are promoting the Long Beach terminal.

The next agency whoae judgment we are expected to trust is the federal government. Although we do not accuse the federal government of special interest, it is a fact that federal agencies have a record of rushing into environmentally unsound projects in an effort to provide ready resources.

An excellent example among many ie the Teton Dam failure just recently returned to the newe. The likelihood of exactly the kind of failure that did occur wae foreaeen by eome people before the dam was built, but the warning ignored by the Buresu of Reclamation. Now, according to a front-page story in the Loe Angeles Times of Wednesday, January 5, the Bureau ie getting ready to commission an expensive independent study of its own dam-building safety procedures after the loss of 11 lives, 100,000 acres' topaoil, 4000 homes, 250 businesses, 3500 farm buildings and 13,000 head of livestock. Again, this ia just one example of the way the federal government has often rushed into decisions favoring projects that turned out to be environmentally catastrophic, and done so in the face of evidance that auch accidente were predictable.

Finally, we are asked to believe the testimony of an agency under the appointive control of the City of Long Beach. The record of the City of Long Beach and its appointive, semi-autonomoua commissions ia ao deplorable and has been so well documented of late that it seems unnecessary to lengthen this letter by citing individual examplee. The Port of Long Beach is among the worat of theee agencies in terma of accounting to the people. Once more the record of the groups involved, the only basis we have for evaluating the proposal to build a terminal, leads us to question their impartiality, their veracity, or their wisdom.

It is often argued that the Port of Long Beach has a good safety record and that recorded environmental disasters anywhere represent only a small percentage of the projects safely carried out. Theas arguments are based on abstractions, on statistical probabilities. But what do probability figures mean now to the people who were in the wash of the broken Teton Dam? What difference does it make now to the fishermen of Massachusetts how many oil tankers did not break up in their waters? And what difference will it make to the people of Long Beach how many units of pollutanta are not escaping into the air from the transfer of Alaskan oil in their port, if they cannot breathe properly on account of the pollutants that are escaping?

We are troubled that we cannot trust the word of experte because people that stand to profit from the terminal are the only ones with enough money to have experts in their service. Who speaks for us when theee interested parties repeatedly present the picture of millions of barrels of oil gushing from the Alasks pipeline with no place to go, an image designed to scare the public into immediate acceptance of some ill-planned solution. Who asks for us the simple yet logical question: Why is it necessary to tap the oil before there is an environmentally safe way of handling it?

How can we get people who deal in such generalizations as "the nation's energy needs," "worst case analysis" or even "tax revenues and jobs" to hear the small voices of people who have to live every day with the possibility of real, specific disasters like earthquakes, spills, air pollutanta, explosions--

calamities that can render suddenly meaningless any advantages from additional energy, jobs or tax relief.

Please recommend against the Long Beach terminal until a better-planned solution can be found.

Yours very truly,

Patricia T. Bliss

Patricia T. Bliss
James H. Bliss

12-13-76

Dear Project Manager-

On January 4 you will hold a hearing in Phoenix about the pipline SOHIO is planning to build across Arizona.

I am writing to tell you that I am strongly against it. It would be an eyesore in our beautiful state, and it would be ecologically harmful - to our plants and wildlife, and maybe also to our water supply.

Please don't let them build it! They can take the oil east some other way.

Thank you!

Sincerely,

Helen C Ross

Mrs. Helen C. Ross
600 W. Orange Grove Road
#F146
Tucson, AZ 85704

1-9-77
Midland Texas
79701

Dear Sir:

Your Pipe line Comes Through our Place; We're all For Progress too —— would it be Possible For you to move the Easement over, the Same distance East of the Texas Electric Easement, instead of Coming on the West side — you see we will have three Easements on Twenty Acres — Aprox! 5 Acres in Easements is a lot don't you think? We plan (Materials being Bought) To Put More Mobil Home Spaces West of the Texas Electric Easement.

This Land is Section 31, Block 38 T-1-S, T&P RR Co. Survey. Col Miles East of City Limits of Midland.

If you will do this For us it will mean over 12000.00 Per yr. to us.

Thanking you in Advance

(Alyce Garner)
Mrs Ray Buckshaw

January 24, 1977

Dear Sirs:

I must register my protest against the SOHIO proposed Arizona Pipeline. I do not feel that a pipeline is the appropriate means to transport the oil from Alaska.

I have many objections to the proposal. First, an unsightly pipeline stretching across the land is foolish. I am sure miles of pipe will result in damage to the sensitive soil in Arizona. Car Tracks alone will last decades on the fragile desert soil. Thus, the necessary construction involved in laying miles of pipe will leave long-lasting and ugly scars. Another danger of pipelines are oil leaks. If the pipeline is buried, (more scarring to the earth), these leaks will be hard to trace and leave countless amounts of oil before the leak is discovered, to damage plant and animal life. A considerable amount of time would be wasted in the search for the leak and subsequent uncovering of pipeline to stop the leak. If this proposed line is not buried, it will forever remain an eyesore. Buried or not, the spilling of oil from leaks will destroy the fragile ecological balance.

Furthermore, the this Agency, which demonstrated inexcusable incompetence in the Alaskan Pipeline assignment should propose to supervise another pipeline should be vigorously opposed and its motive carefully looked at. Not until near completion of the Alaskan Pipeline were the problems, inefficiencies and shoddy workmanship exposed. There will surely be more, unforseen problems when the operation starts.

Another unresolved issue are the SOHIO oil tankers to transport the oil from Alaska to California. These tankers have not been required to outfit themselves with the recommended safety features. Some of these are double bottoms and separate ballast tanks to lessen the impact of an oil spill.

I propose transportation by train once the oil reaches California. They (the trains and tracks), already exist eliminating the need for additional construction, avoiding more and needless harm to the landscape. This transportation by train would provide a needed stimulus to the train industry.

Please place this letter of protest on public record.

With deep concern,

Joan Bohmann

Joan Bohmann
3901 E. Whitton
Phoenix, Az 85018

North Coast Property Owners Association

Post Office Box 1461, Cambria, California 93428

January 23, 1977

Bureau of Land Management
P O Box 560
Los Alamitos, Cal 90720

Dear sirs;

The North Coast Property Owners Association, Inc. wishes to go on record as being opposed to any super tanker port anywhere on the west coast from Point Conception to the Golden Gate.

In view of many recent tanker sinkings and groundings we feel a super tanker port along this coast would be detrimental to the sea life and human life.

Very truly yours,

Walter E Cole.

Walter E Cole, President

Jim Tatum - Public Hearings on Proposed SOHIO Crude Oil Transportation System, Bureau of Land Management, U. S. Department of the Interior.

We're here to present our views with respect to one of America's most needed resources "OIL". Bringing this crude oil down from the north slope of Alaska is a direct route to energy independence for this nation.

The big question seems to be what shall we do with it? We must recall that the main purpose for the development of Alaskan Oil was to supply America with a deperately needed resource at a reasonable cost without foreign control.

To turn this resource over to the Japanese or to transport it around the world would in fact defeat both of these intended purposes.

There has been some serious questions about safety with respect to oil spills, damaging the marine environment and fumes polluting our air. We in organized labor concur with the concern of these questions. We support a clean environment but we also see the necessity for energy to maintain our economy.

The proposed trade-off of pollution sources is one method of assurance that air in Los Angeles will not be further polluted by this project. New technology is another.

It must be noted that in recent weeks tankers operating under flags of convenience have been in trouble. We are convinced that this is because these vessels do not work under the same safety standards and regulations as American flagships.

The economic impact of the explosion of the Sansinena for the Los Angeles area cannot be calculated at this time. But it has delayed important projects which could resolve our poor energy situation.

Proposals to put an LNG plant in Los Angeles Harbor and the SOHIO project in the Port of Long Beach have been seriously setback by this tragic incident. The point is that these projects call for the usage of American vessels that comply with the safety standards necessary to make sure that an incident such as the Sansinena doesn't occur again.

All of the ships involved in these projects will be constructed in the United States under conditions which provide for the most rigid safety standards and the best technology available.

On the job front, this project would bring some 400 new construction jobs to the City of Long Beach for approximately two years. After construction, there would be some 430 direct jobs over the life of the project. There would also be substantial income for the City of Long Beach as well.

One may say that we are only concerned about the jobs this project will create. This is far from being true. We respect the fact that there is a vital need for energy in this community and in this nation. Those of you who remember the long lines at service stations in 1973 and who have studied the figures for future unemployment if we don't get needed energy by 1981 know that our concern is to prevent economic disaster.

We are working people and our automobiles are our prime source of transportation to go and get home from work. We want to remain among the ranks of the employed.

This Alaskan oil could start America on its way to total energy independence and this is what the working people of America so desperately want to see.

We don't say bring this oil into Long Beach at any cost, we say that every necessary precaution to protect our environment must be taken for we want clean air and clean beaches as much as anyone else. We feel that there has to be a balance between the protection of our environment and the jobs our people need.

Let us remember that America bears the distinction of being the first and only nation to land man on the moon and safely return them to earth. I submit that with American technology, if we cannot safely construct three berths, eight oil tankers and one pipeline, then our technology is undoubtedly in serious trouble.

Re Discharging Alaskan Crude in Long Beach Harbor

Recommendations

Create a panel of tanker experts + petroleum engineers. Said members to be retired and/or having no connections with the oil companies or other special interests. This panel could clear up the many misconceptions now in circulation; such as: inherent dangers of tanker operations within the harbor. Alternatives such as offshore mooring berths with submarine pipeline to shore. Require foreign flag tankers to employ expert shore personnel to oversee and/or physically load + discharge their cargo. Prohibit ballasting of dirty tanks; gas freeing or tank cleaning within the harbor area without special permission.

Answers to critics

Jobs: Tankers at offshore mooring will create more jobs to service them via launches.

Reduces dangers of collisions

Eliminates strandings due to mechanical failures

" mishaps occuring during piloting + docking operations

Pollution: Tankers in San Pedro Bay account for less than 1/100 % of the pollution in this basin. Where did Mr. Quinn get his figures?

Spills: Occur while loading; almost impossible when disch'g.

Vapor emissions: Same as above. Fresh air is drawn into the cargo tanks while disch'g.

Unauthorized persons aboard: Easier to control.

Edw. E. Butler
2100 2nd St. Long Beach, 90803. Tel. 434-8563

Dear Sir,

This is in support of the SOHIO project to transport North Slope Crude by tanker to Long Beach and then by pipe line to the mid-continent area.

We are currently importing 44% of our crude requirements which leaves the welfare of our great nation vulnerable to the whims of the Arab nations + OPEC. We have a 25 billion trade deficit.

The SOHIO project is the least costly and most expedient method of moving North Slope crude to the mid continent market.

To sling crude thru the Panama Canal is going to place an unnecessary cost on the consumer.

I am sure that we have the technology to control air pollution and oil spills if they should occur.

This is a matter of national survival and we should get on with a constructive program to achieve energy self sufficiency

R. F. Haefner
1842 Fairway Circle
Lake San Marcos CA
92069

To: Project Manager 1-21-77
Bureau OF LAND Management
P.O. Box 660 - Los Alamitos, Ca. 90720

From: DEAN S. DETRICK
Resident of Los Osos, California

Subject: SUPERTANKER PORT ① AVILA-BEACH ② Guadalupe Dunes NO!

Central California along the Coast and immediate area of proposed Supertanker Port is the last refuge for our Retired Citizens for FRESH CLEAR AIR and Clean Sunny Beaches! Do you want to shorten the lives of these people with smog, dirty polluted water and filth?
A SUPERTANKER Port can do just this + more!
Just remember, we are all going to be Senior Citizens, sooner or later — Right?
1. Above Area 250' Inversion MYRA — Avila Beach F No Rain!
2. Los Angeles Area 2500' Inversion MYRA — L.A. - Rough pollution!

People come from all over the State, U.S. + Wold to see our Area for Beauty, Scenery, Wildlife, and clear water for swimming and swimming. A Supertanker Port? — No Way! Forget It!
why? — Page 2. (over)

If permitted →
① Black globs of Oil on our Beaches and in the water for swimmers to swallow etc.
② Wild life Birds, with oil on their feathers would die (mass kill)
③ An odor of greasy oil coming from our Ocean
④ Our scenery dotted with black ugly oil derricks? Forget It! — Go Home —!
⑤ Oil furnace should not help our growing aquaculture products — Take our Food Too?

If a Supertanker Port Allowed of any size, it would only go one way! Get larger, larger + larger! — Expand, expand, expand — Doubling, tripling + + + the above mentioned problems and wants to Great Area —
Wouldn't Russia or any future enemy love to see a Super Tanker Port at Avila — One Target! — ONE Bomb! Pow! — Wiped Out! — Morro Bay, Cambria, San Luis Obispo, Arroyo Grande, Grover City, Pismo Beach, Santa Maria
Enough Said! It's on your Pensions!
Dean Detrick

Allan Hancock College
. 0 South College Drive
Sa a Maria. California 93454

January 31, 1977

Mr. Charlee Tulloes,
Project Manager
Bureau of Land Management
P.O. Box 660
Los Alamitos, CA 90720

Dear Mr. Tulloes,

RE: Draft Environmental Impact Statement
"Cruda Oil Transportation Syetem: Valdez, Alaeka to Midland, Texas."

PVIII-12 Avila Beach to Oso Flaco, CA

I agree with the Impact Statement which states: "Dasvlopmsnt of either eita as a crude oil off-loading terminus would significantly change tbs rural, agricultural and recreational land use character of tbe area..."

The main industry in our area is agriculture. Crops are very eensitivs to air pollution. Ws already recsivs over 25 tons of sulfur dioxide from our local Union Oil complex each day. Any furthsr deterioration of air quality will havs an advsrss sffsct on agriculture. As population increaese the nesd for the producte of sgriculture increases and we havs lsss prime lsnd svailebls on which to farm.

Ws have e low thsrmal inversion in our coast vallsys (250 fsst average compared with 2500 feet average ovsr Loe Angslss). A monobuoy in our area will attract refineries and othsr oil-related indusetries. Ultimataly the facility will recsive 3 million barrels of oil per day with an incrsaee in accidsnt potentisl, deterioration of air quality and a lose of agricultural productivity.

I urgs thst thie facility not be built in the Avila, Oso Flaco, Cuadalupe area.

Sincerely yours,

William Danneen

William Danneen, Biology Instructor

Dan Luer obsrpd (the little piece of Heaven that dropped down beside the Pacifica ocean and we're taken care to keep it that way.)

Dear Sirs:
It comes to my attention that those in high "say" placer wants to jeopardize our lovely little county for a "super tanker" port. It offends me greatly that there nothing sacred but commerce and money to be made from it. You didint get here first and it should be "finders keepers" "loosers weepers". In time to come I may not believe that guy that discovered the wheel was so great and maybe not even Henry Ford. God gave us legs first — H. Avery 55 No. Broad

ROBERT A. MAY
WILLIS R. DEES
LOUIS W. BARASSI
C. ROBERT PURSLEY
CABOT SEDGWICK, of counsel

May, Dees & Barassi

Attorneys at Law, 3rd Floor, United Bank Building, Tucson, Arizona 85701, (602) 624-2301

NOGALES, ARIZONA OFFICE
314 ARROYO BOULEVARD
(602) 287-2493

January 3, 1976

Project Manager, BUREAU OF LAND MANAGEMENT
E I S PROJECT OFFICE
P. O. Box 660
Los Alomitos, CA 90720

Dear Sir:

This office represents Mr. Richard F. Wilson, owner of the Muleshoe Ranch, situate in Cochise and Graham Counties, Arizona.

The SOHIO line, the subject matter of the Draft Environmental Statement presently under consideration, passes through a portion of my client's ranch. In addition, the El Paso Natural Gas Company proposes to install and erect e pump station designated in the environmentel impact statement es the Reddington Pump Station. My client objects to the construction of such a power line and the clearing of e new utility corridor which such a new powerline would entail.

We would support, however, the BUREAU OF LAND MANAGEMENT's recommendation that power be brought to the proposed Reddington Pump Station along existing easements in order to eliminate a new utility corridor.

Further, we would also propose that whetever access roads are necessary for the maintenance of the Reddington Pump Station be subject to the exclusive control of the El Paso Natural Gas Company and my client st such point where the said access road enters my client's ranch.

Yours very truly,

MAY, DEES & BARASSI

Louis W. Barassi

Louis W. Barassi

LWB/t

Dec. 10

Dear Sirs

Concerning: BLM Pipeline Project Statement

The BLM Environmental Impact Statement clearly shows the dangers of the crude oil pipeline.

The danger to the bighorn sheep is very real. These majestic animals must be taken into consideration, as they are very successfull to environmental invasion.

The damage to the scenic value must also be preserved. 45 miles of powerline is unnessecary and the alternative 6 mile plan should be used.

Pipeline river crossings must be kept safe because of the tremendous damage potential of a spill.

Sincerely,
Thomas R. Hanna

ECOLOGY CENTER OF SOUTHERN CALIFORNIA
project of Educational Communications, Inc.
2318 WESTWOOD BOULEVARD · SUITE E · LOS ANGELES CA 90064 · (213) 475-1619

MAILING ADDRESS
POST OFFICE BOX 24388
LOS ANGELES, CALIFORNIA 90024

January 21, 1976

Project Manager
Bureau of Land Management
P.O. Box 660
Los Alamitos, California 90720

Dear Sir:

The members of the Ecology Center of Southern California respectfully submit our comments on the Federal Draft Environmental Statement covering the SOHIO plan for transporting Alaskan oil via tankers, a marine terminal at Long Beach, and pipeline system to Midland, Texas.

We believe that the Sohio project could present grave hazards for the environment of the area, especially Long Beach harbor and the Los Angeles air basin. Tanker unloading and flushing procedures would produce significant increases in hydrocarbon, NOX and SO_2 emmissions in the air basin where already air quality is extremely poor. Also, the project requires that 650,000-barrel storage tanks be built on Pier J, a facility which is on 4,800 feet of sand with a liquification factor and which is within two miles of two major earthquake faults. Major oil spills could result not only from accidents, but also a severe earthquake.

By converting the existing natural gas pipeline from Texas into a pipeline for crude oil to Texas, the SOHIO project would cut off major natural gas (a cleaner fuel) supplies for Southern California. This could lead to greater reliance on crude oil (not a clean-burning fuel), or it could encourage gas companies to pursue their proposals to ship liquid natural gas (LNG) from Alaska to LNG terminals in Southern California -an extremely expensive and dangerous prospect.

We also believe that an increase in the number of tankers travelling off the California coast would result in more tanker accidents and more disastrous oil spills along the shore as well as within Long Beach harbor. (Presently we see that safety regulations of oil tankers are simply inadequate in protecting our waters and wildlife.)

For the above reasons, the Ecology Center strongly opposes the SOHIO project and strongly urges the Bureau of Land Management, in considering this plan, to take utmost precautions for the environment and people of the Los Angeles air basin.

Sincerely,
Trish Beall
Trish Beall
Associate Director

1864 Thelma Drive
San Luis Obispo,
California 93401
January 23, 1977

Project Manager
Bureau of Land Management
P. O. Box 660
Los Alamitos, Calif. 90720

Dear Sir:

I would like to discuss the possibility of having the supertanker port on the central coast of California. I do not think that the central coast of California is a suitable site for this port for the following reasons:

1. The inversion layer is very low in this portion of the state. It is evident without the addition of a supertanker port that we shall have some kind of smog. At this point we have some in the air on many days this fall and winter. This is due to automobiles since there is essentially no industry. The only industry which pollutes the air now is the Union Oil refinery and the Pacific Gas and Electric power plant. We share the air basin here in San Luis Obispo with the portion of the coast in northern Santa Barbara County; thus a site here must consider the possible damage not only in San Luis Obispo County, but also in Northern Santa Barbara County. Air pollution is a very real danger in this portion of California.

2. Oil spills are a great danger in this area also. The estuary entering Morro Bay cannot be destroyed by an oil spill without affecting the marine life. It also seems that the nuclear power plant should be taken into account as a possible danger if oil were to get into the water cooling system. There have been many oil spills reported lately. I feel they are too much of a risk to this part of the California coast to warrent having a supertanker port here.

3. This area is relatively uncrowded. If a supertanker port would certainly bring a refinery. Not only would a refinery bring air pollution, but the additional cars and sewerage will be a strain on this area.

For these reasons, I don't feel that any plan set forth in an EIS can solve the above problems a supertanker port will bring.

Sincerely,
Eileen Pritchard
Eileen Pritchard

C CUNNINGHAM
8707 CASITAS RD
ATASCADERO CA 93422

western union Mailgram

2-042926E024 01/24/77 ICS IPMRNCZ CBP LSAB
8054661427 MGW TDRN ATASCADERO CA 100 01-24 0543P EST

PROJECTB MANAGER BUREAU OF LAND MANAGEMENT
PO BOX 660
LOS ALAMITOS CA 90720

WE ARE AGAINST THE SUPERTANKER PORT BEING ON THE CENTRAL COAST
CRAIG AND EILEEN CUNNINGHAM

1T144 EST

MGMCOMP MGM

DEAR SIR
I WANTED FOR SURE YOU
TO KNOW THAT I DON'T KNOW
ONE PERSON THATS FOR THE
SUPERTANKER PORT HERE IN
AVILA BEACH AND ALL THE
POLUTION IT WILL CAUSE. PLEASE
DON'T LET IT BE IN A PLACE
SO RICH IN BEAUTY. IF IT IS
TO GO IN LET IT BE IN
A PLACE LIKE LONG BEACH THAT
IS ALREADY PRETTY WELL POLUTED.

THANK YOU
TOMAS A RICHARDSON

(5)

T.J. OWENS
151 WAWONA AVE.
OHELL BEACH, CA 93449

JAN. 20, 1977

Project Manager
Bureau of Land Management
P.O. Box 660
Los Alamitos, Ca 90720

Project Manager:

Even the thought of establishing a supertanker port on the Central Coast of California is a disservice to us all. The degradation of the quality of our lives resulting from such a project would be intolerable.

Please reconsider other alternatives to the site of such a port.

Sincerely,

T. Owens

January 21, 1977
Costa Mesa, Calif.

Project Manager,
Sohio Project Office,
P.O. Box 660,
Los Alamitos, Calif. 90720

Dear Sir;

I am James A. Common of 409 Broadway, Costa Mesa, Calif. 92627. I am a port pilot employed by Jacobsen Pilot Service Inc., the piloting contractor for the Port of Long Beach. I have over 40 years seagoing experience, including the past 16 years as a Long Beach Pilot.

I have followed the Sohio Project closely, and have carefully studied the D. E. S.. As a concerned citizen and native Californian I would like to go on record as being wholeheartedly in favor of this project, which would provide other areas of our country with a much needed energy source.

At several of your hearings concern has been expressed by people with obviously little knowledge of such things, about the dangers of handling the proposed ships and the traffic dangers to small craft. We regularly handle ships of this type and size with no problem. Due to the proximity of the Sohio docks to the breakwater entrance, ships of that magnitude will be coming into the entrance very slowly, and consequently should present no problems to boaters coming in or out, who would be able to pass or go around these ships.

In considering the alternate proposal of the S.B.M. mooring in the San Luis Obisco area, it must be remembered that a great deal more rough weather is encountered up there, and that in the event of any spill, containing it in open water is not easy, if the weather is bad. I believe that when the tanker finally broke up in a gale off Nantucket, that containment was impossible.

Our California Air Resources Board, headed by Tom Quinn, who is a journalist not a scientest, has been making many grossly exaggerated claims about this and other projects. They favor the alternate plan going through Kitimat B. C.. A January issue of the Marine Digest, from Seattle, had an article that stated a strong opposition to this route by five or six Canadian environmental groups. Our A.R.B. wanting it to go through there will not necessarily make it possible.

Canada has many problems in her government at present, and I do not think that we should let them be in a position to have any leverage on us. This pipeline and any subsequent pipelines should be all in the U.S.A. where we have a complete and continuing control over them.

The Sohio project seems to be well planned and certainly appears to be the most expeditious and economical way of getting this much needed commodity flowing into our country.

I would like to compliment you gentlemen on the manner in which you conducted these hearings.
Thank you for keeping me informed.

Sincerely, James A. Common

---

483 Kings Ave.
Morro Bay, Cal 93442
Jan. 20, 1976

Project Manager,
Bureau of Land Management
P.O. Box 660
Los Alamitos,
CA 90720

Dear Sir

We are unalterably opposed to a supertanker port on the Central Coast. The impact would be too drastic on a beautiful rural land not only because of the low inversion layer here but socially and economically it would burden the area with deleterious change.

Oil spills and smog would result in harm to fishing, beaches, and recreation and living generally.

With Vandenburg and Diablo already a missile target, a major oil port would enhance it as a target area.

Our county should remain a unique and treasured vacation refuge and an agricultural area, not averaged into a miserable environment by the oil industry.

M. + R. Foster

Willis G. Craig
R. R. 1, Box 209
Templeton, Calif. 93465

January 20 1977

Project Manager Tanker Facilities
Bureau of Land Management
P. O. Box 660
Los Alamitos, CA 90720

Dear Sir:

I feel strongly that your organization should do a bit more groundwork before pushing your recomendations for a deep-water tanker port on the South-central California coast.

You must know that the coastal area from Estero Bay to Point Sal has the lowest persistant inversion layer in the state. Wedge-type inversions of as little as 200 -250 feet are common. Hydrocarbon vapors injected into this limited amount of air space by evaporation during transfer and storage of the tanker contents will therefore result in heavy pollution in coastal communities where a large number of recreationists and retirees come to escape the smog so prevalent in the south-coastal areas.

Location of the controversial tanker port in this area may be politically expedient, but it is morally wrong to risk the destruction of the last clean air santuary in temperate California. Please study this situation carefully before making any recomendations.

Very truly yours,

Willis G. Craig

San Luis Obispo County
APCD Hearing Board.

TESTIMONY PRESENTED BY MR. JOE VENTURA

GOVERNOR'S ENERGY ADVISORY COUNCIL

JANUARY 7, 1977

My name is Joe Ventura. I am testifying today on behalf of the staff of the Governor's Energy Advisory Council of Texas of which I am the Associate Executive Director.

The Governor's Energy Advisory Council is composed of 10 key elected state officials. The Governor serves as the Chairman of the Council and the Lt. Governor serves as the Vice-Chairman. The Council is charged with the responsibility of recommending energy policy positions on both state and national issues. One of the issues our staff has addressed is the distribution of Alaskan crude oil within the lower 48 states.

We have concluded and recommended to our Council that it is in the best interests of the nation for the orderly completion of the SOHIO project as a method for distributing the anticipated surplus of Alaskan crude oil to Eastern and Midwestern consumers.

Although the stated purpose of this hearing is to examine the environmental impacts of this project, the reason why this project has become a point of controversy is based on the fears of Western customers of the El Paso Natural Gas Company that they will be deprived of gas supplies if one of the six El Paso transmission lines is put to use as a west-to-east carrier of Alaskan crude oil.

It is to this point that I want to speak today.

In conjunction with our mandate to articulate energy policy positions, we have developed energy supply and demand forecasts based on various policy options. Each of the forecasts show that regardless of the policies implemented, Texas simply will not have available for export to other states gas in the quantities that exist today or that existed in the recent past. Supplies available for either intrastate or interstate consumption will diminish as a result of depletion of reserves from known producing areas.

I will discuss three scenarios related to supply and demand. All of these scenarios are based on market conditions and do not reflect the fact that much of the gas exported is subject to long-term contracts and the legal requirement that interstate reserves remain dedicated to interstate commerce for the life of the reservoir. Therefore, the actual reduction of exports will occur less rapidly than these figures indicate.

In 1975 Texas produced 7.43 tcf of marketed gas of which 3.74 tcf was exported. Let us first consider gas supplies available under a "Business As Usual" scenario which assumes:

(1) No intrastate price controls

(2) Interstate price controls at the levels established under the existing FPC Order 770-A (i.e., $1.42 per Mcf for new gas) and,

(3) A gradual phaseout of gas used in large boilers as ordered by the Texas Railroad Commission in Gas Utilities Docket 600.

Under this scenario marketed gas production declines from 7.43 tcf in 1975 to 5.06 tcf in 1985. Gas exports decline from 3.74 tcf in 1975 to just under 1 tcf in 1985 with all exports ending in 1988.

Under the "Free Market" scenario without a mandatory boiler fuel phase-out, Texas marketed gas production should decline from 7.43 tcf in 1975 to 6.04 tcf in 1985. However, even under this scenario gas exports should decline to virtually zero by 1982 because of the assumption that there was no mandated boiler fuel phaseout. If, on the other hand, we assume free market conditions and strict boiler fuel controls, gas exports will remain at near historic levels and gradually decline phasing out entirely in the 1990's.

Under no set of circumstances does the model forecast an increase in Texas gas exports. Let us now assume the worse possible case as far as expanding production. We call this our "Maximum Government Controls" scenario. This scenario assumes a return to the old FPC national ceiling rates of 52 cents per Mcf and a hypothetical intrastate ceiling of 75 cents per Mcf coupled with strict boiler fuel phaseout provisions. Under these conditions the model forecasts a drop in production from 7.43 tcf in 1975 to 4.13 tcf in 1985 and a drop in exports from 3.74 tcf in 1975 to a virtual halt in exports by 1980.

Our model does not attempt to break out supplies available in various producing areas for export to particular consuming areas.

I have seen the supply figures presented by the El Paso Company in its brief for the Federal Power Commission. The figures presented agree with our projections -- there simply will be no return to the era of plentiful Texas gas exports.

A country that runs on oil can't afford to run short

Permian Basin Petroleum Association

P. O. Box 132 • (915) 684-6345 • Midland, Texas 79701

STATEMENT BEFORE
INTERIOR DEPARTMENT HEARING
JANUARY 6, 1977

The Permian Basin Petroleum Association is pleased to have this opportunity to take a position supporting the Sohio proposal to move crude oil from Alaska to areas where shortages of domestic crude oil are forcing our industry to refine foreign crude oil and import refined products to meet the Nations demand for anergy.

Based upon our experience with the thousands of miles of pipeline already installed in the Permian Basin, we can see no detrimental impact to the environment of this area by the installation of an additional 80 miles of pipeline - the safest, cleanest, simplest, most efficient method of transporting crude oil.

In fact, we would like to commend Sohio in this effort to meet the refinery needs of areas already having crude oil shortages. Alaskan crude oil offers the only immediate means for decreasing our growing dependence on imports of both crude and finished products, and Sohio should be commended for coming up with a viable plan to provide our refinery and marketing system with a vitally needed, domestic source of supply.

So far as economics are concerned, the Sohio plan will be of minimal value to either the Permian Basin, or to Midland, but it is a step toward meeting the needs of the country and we support this action.

Respectfully submitted,
Permian Basin Petroleum Association

Environmental Committee
Co Chairmen Art Dinsmoor
and Dick Donnelly

Dec. 1, 1976

Project Manager
BLM Project Office
P. O. Box 660
Los Alamitos, Calif 90720

Dear Sir:

I was astounded to read the Caption in the Tucson Daily Citizen News Paper, by Edward Stiles: "Oil Spills, Wildlife are issues".

In my opinion there are no basie for any such judgement as to an oil pipe line going through the state of Arizona. Especially if one takes into account any alternative we might have to turn to. Oil is being imported into these United States from foreign countries, and has been for a long time now. We are fortunate enough to have our own source of supply of oil within the bounds of our country, and should get this commodity to the consumers by any method we might have. Realistically, the route of the pipeline mentioned in the article, does not and will not harm anyone or anything.

I have had considerable experience in the oil industry, and feel that I am a qualified speaker on the subject.

There is plenty to be said about Richard Nixon's 55 miles per hour highway driving speed. These people should be forced into a V. W. to drive from coast to coast and see and feel the disparity of the whole program. We finally need some common sense in our Government, and I could expound on that for hours. O. K., say, traveling at 55 miles per hour, the engine runs longer per distance, burning more fuel, and consequently spewing more "gook" into the air. Moreover, automobilee are designed to run faster, or elee one ends up with an engine repair bill to clear the carbon out of the system. On and On and On.

Please clear the way for the oil pipeline and thank God that we have the oil for the line.

Sincerely yours,

J. J. McLaughlin
811 W. Kovaya Dr.
Tucson, Arizona 85704 (Democrat)

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268 LaCanada
San Luis Obispo, Ca
Jan. 23, 1977

Project Manager
Bureau of Land Management
PO Box 660
Los Alamitos Ca 90720

Dear Sir

As a resident and long time lover of San Luis Obispo County I am absolutely opposed to the Super-Tanker Port proposed for the Central Coastal Area! With our mountains to hem us in will ~~with~~ the air contaminents it will spoil one of the most beautiful and scenic spots in California. Besides our tourist based economy we have some of the best and delicate soils producing fresh foods for hungry city people until you Sprague oil holding tanks all thru it!! Please reconsider - don put it here!!

Sincerely,
Charlotte Green

Dec. 30, 1976
14736 High Valley Rd
Poway Calif. 92064

Project Management
Bur of Land Management
Alamitos, Calif

Dear Sirs.

I write in the faint hope that this letter may act as a counterweight to those you may receive from people who believe they can have all the gasoline they want without inconvenience.

After our oil companies have performed a heroic job of developing our own source of oil in Alaska, they should be given all assistance in a viable plan to deliver our oil where it can be utilized.

My husband and I trust you will consider the plight of the taxpayer, (re balance of payments) the average person in the United States as wise as the ecologist.

Sincerely,
Mr & Mrs John L Hoyt

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Form 1279–3
(June 1984)

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Final environmental
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